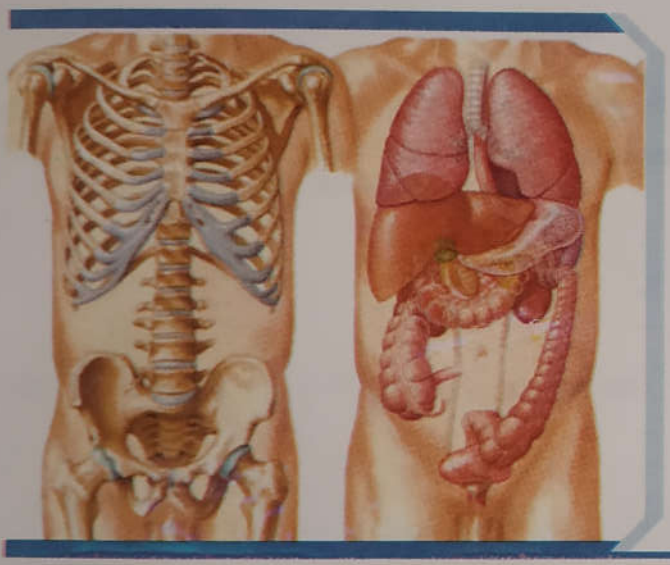


ANATOMY

Upper Limb – Questions

Q1. False about clavicle:
a) Ossifies in membrane
b) Horizontal bone
c) No medullary cavity
d) Most common site of fracture is the junction of medial 1/3rd with lateral 2/3rd

Q2. FALSE regarding Klumpke's paralysis is:
a) Claw hand deformity
b) Intrinsic muscles of hand involved
c) Horner's syndrome
d) Upper trunk of brachial plexus involved

Q.3. Which of the following shows membranous ossification :
a) Femur
b) Humerus
c) Radius
d) Parietal bone

Q.4. Froment test is positive in lesion of:
a) Radical nerve
b) Ulnar nerve
c) Axillary nerve
d) Median nerve

Q5. Which among the following is a branch from the trunk of brachial plexus?
a) Suprascapular nerve
b) Long thoracic nerve
c) Anterior thoracic nerve
d) Nerve to subclavius

Q6. FINGER DROP WITH NO WRIST DROP is caused by lesion of:
a) Radial nerve in the radial groove
b) Posterior interosseous nerve
c) Anterior interosseous nerve
d) Ulnar nerve behind medial epicondyle

Q7. Flexion of MCP joint and extension of IP joints is the action of All except:
a) Palmar interossei
b) Dorsal interossei
c) Lumbricals
d) FDS

Q8. Brachialis is supplied by:
a) Radial and Ulnar nerve
b) Median and musculocutaneous neve
c) Radial and musculocutaneous nerve
d) Radial and Median nerve

Q9. If the greater tuberosity of the humerus is lost, which of the following movements will be affected?
a) Adduction and flexion
b) Abduction and lateral rotation
c) Medial rotation and adduction
d) Flexion and medial rotation

Q10. All are flexors of the elbow joint except
a) Biceps
b) Brachialis
c) Brachioradialis
d) Teres minor

Q11. The following is true of brachial plexus:
a) Cervical rib involves lateral cord
b) Musculocutaneous nerve arises from medial cord
c) Radial nerve arises from posterior cord
d) Post fixed plexus is formed by C4,5,6,7,8 T1

Q12. Artery present in the anatomical snuff box is –
a) Radial
b) Ulnar
c) Interosseus
d) None

1. d	2. d	3. d	4. b	5.d>a	6. b	7. b	8. c	9. b	10. d	11. c
12. a										

Q13. Deep branch of the ulnar nerve supplies the following mucles except–

a) Adductor pollicis
b) First dorsal interosseous
c) First lumbrical
d) Third lumbrical

Q.14. Structures piercing clavipectoral fascia are all except :

a) Cephalic vein
b) Thoracocromial artery
c) Lateral pectoral nerve
d) Basilic vein

Q15. Brachialis is supplied by:

a) Radial and Ulnar nerve
b) Median and musculocutaneous neve
c) Radial and musculocutaneous nerve
d) Radial and Median nerve

Q16. Extension of the Metacarpophalangeal joint is lost in injury to -

a) Median nerve
b) Ulnar nerve
c) Anterior interosseous nerve
d) Posterior interosseous nerve

Q17. Abduction of the shoulder joint above 90° is:

a) Biceps
b) Deltoid
c) Serratus anterior
d) Supraspinatus

Q18. Following an incised wound in the front of wrist, the subject is unable to oppose the tips of the little finger and the thumb. The nerve (s) involved is/are -

a) Ulnar nerve alone
b) Median nerve alone
c) Median and ulnar nerve
d) Radial and ulnar nerves

Q19. Each of the following has an attachment to scapula except -

a) Pectoralis major b) Pectoralis minor
c) Biceps brachii d) Triceps

Q.20. The following structures are attached to the greater tubercle of the humerus except-

a) Supraspinatus muscle
b) Subscapularis muscle
c) Teres minor muscle
d) Infraspinatus muscle

Q21. Adductors of the hand at the wrist joint include-(PGI)

a) Brachioradialis
b) Flexor carpi ulnaris
c) Extensor digitorum
d) Extensor carpi ulnaris

Q22. A patient is found to have pus in the midpalmar space. The space is -

a) The space around the hypothenar muscles
b) The synovial sheath for the flexor pollicis longus tendon
c) The ulnar bursa
d) The space around the muscles of the thenar eminence

Q23. Carpal tunnel syndrome is due to compression of –

a) Ulnar nerve b) Median nerve
c) Radial nerve d) Ulnar artery

Q24. The structures Attached to coracoid process are all except -

a) Short head of biceps
b) Coracobrachialis
c) Pectoralis minor
d) Long head of biceps

Q25. Medial cord of the brachial plexus gives rise to all except-

a) Nerve to supraspinatus
b) Ulnar nerve
c) Medial cutaneous nerve of arm
d) Medial cutaneous nerve of foream

Q26. Regarding serratus anterior muscle, which is incorrect-

a) helps in punching
b) Lifts arm above the shoulder
c) Supplied by long thoracic nerve
d) Orginates from lower 8 ribs

Q27. Boxer's muscle is –

a) Trapezius b) Seratus anterior
c) Psoas major d) Latissimus dorsi

13. c	14. b	15. c	16. d	17. c	18. c	19. a	20. b	21. b,d	22. a	23. b
24. d	25. a	26. d	27. b						

Q28. Fracture of the surgical neck of humerus results in-
a) Loss of sensation in dorsal forearm
b) Flat shoulder
c) Wrist drop
d) Claw hand

Q29. Musician's nerve is nerve-
a) Ulnar b) Radial
c) Median d) Axillary

Q30. Labourers nerve is-
a) Median b) Ulnar
c) Radial d) Sciatic

Q31. Deep branch of the ulnar nerve supplies the following muscles except –
a) Adductor pollicis
b) First dorsal interosseous
c) First lumbrical
d) Third lumbrical

Q32. The Prime Flexor of metacarpophalangeal joint
a) Lumbrical muscle
b) Flexor digitorum superficialis
c) Flexor digitorum profundus
d) Dorsal interosseus muscle

Q33. Nerve not related to humerus is –
a) Radial
b) Axillary
c) Ulnar
d) Musculocutaneous

Q34. Structure piercing the clavipectoral fascia is -
a) Basilic vein
b) Cephalic vein
c) Superior Thoracic artery
d) Musculophrenic nerve

Q35. Which is correct regarding deep palmar arch -
a) Superficial to lumbricals
b) Lies at level of distal palmar crease
c) Formed by deep branch of ulnar Artery
d) Gives 3 interdigital arteries

Q36. Muscles of the hypothenar eminence are innervated by the-
a) Radial nerve
b) Median nerve
c) Ulnar nerve
d) Median and Radial nerves

Q37. Which of the following nerves is not a branch of posterior cord of Brachial plexus-
a) Thoracodorsal b) Radial
c) Ulnar d) Axillary

Q38. Ulnar nerve supplies all of the following except
a) Flexor digitorum profundus
b) Dorsal interossei
c) Abductor pollicis brevis
d) Flexor carpi ulnaris

Q39. The medial wall of the axilla is formed by the -
a) Serratus anterior
b) Subscapularis muscle
c) Pectoralis major muscle
d) Teres major muscle

Q40. The following structures form the boundaries to the superior entrance into the axilla except the -
a) Clavicle
b) Coracoid process
c) Upper border of scapula
d) Outer border of first rib

Q41. When median nerve is paralysed in carpal tunnel syndrome-which of the following occurs -
a) Abductor pollicis paralysis
b) Flexor pollicis longus paralysis
c) Flexor pollicis brevis paralysis
d) Loss of sensation of thenar eminence

Q42. Axial artery of upper limb is derived from -
a) 4th cervical intersegmental
b) 5th cervical intersegmental
c) 6th cervical intersegmental
d) 7th cervical intersegmental

Q43. Injury to ulnar nerve at wrist causes paralysis of
a) Opposition of thumb
b) Abduction at carpometacarpal joint of thumb

28. b	29. a	30. a	31. c	32. c	33. d	34. b	35. c	36. c	37. c	38. c
39. a	40. b	41. a	42. d	43. c						

c) Adduction at thumb
d) Flexion of metacarpophalangeal joint of middle finger

Q44. The structure that is least likely to be compressed in flexion and abduction of shoulder joint-
a) Supraspinatus muscle
b) Long head of biceps
c) Suprascapular nerve
d) Sub acromial bursa

Q45. Matacarpophalangeal joints are flexed in the paralysis of –
a) Median nerver b) Radial nerve
c) Ulnar nerve d) Axillary nerve

Q46. Blood supply of breast is from all except -
a) Internal mammary artery
b) Intercostal artery
c) Thoracodorsal branch of subscapular artery
d) Thoraco-acromial artery

Q47. All are sensory except –
a) Saphenous nerve
b) Sural nerve
c) Intercostobrachial nerve
d) Long thoracic nerve

Q48. Lower angle of scapula at the level of -
a) T4 b) T5
c) T6 d) T7

Q49. Nerve damaged due to lunate dislocation (in carpal tunnel)-
a) Median & ulnar b) Median
c) Ulnar d) Radial

Q50. Adduction of hand at wrist is done by- (PGI)
a) Flexor carpi radialis
b) Flexor carpi ulnaris
c) Flexor digitorum profundus
d) Extensor carpi ulnaris

Q51. Muscles supplied by median nerve (PGI)
a) Abductor pollicis brevis
b) Opponens pollicis
c) Adductor pollicis
d) First lumbrical
e) Flexor pollicis brevis

Q52. Small muscles of hand are supplied by- (PGI)
a) C6 b) C7
c) C8 d) T1
e) T2

Q53. Median nerve injury at elbow affects all except
a) Adduction of the thumb
b) Flexion at DIP joints of 2nd finger
c) Flexion of PIP of third finger
d) Flexion at 1st and 2nd DP fingers

Q54. Low ulnar nerve palsy is characterised by-
a) Claw hand
b) Sensory loss of medial four digits
c) Weakness of grips
d) Inability to extend at M.C.P. joint

Q55. Thenar eminence is supplied by-
a) Median nerve
b) Radial nerve
c) Ant. Interosseous nerve
d) Ulnar nerve

Q56. Injury to radial nerve in spiral groove-
a) Spares nerve supply to extensor carpi radialis longus
b) Results in paralysis of anconeus muscle
c) Leaves extensions at elbow joint intact
d) Weakness pronation movement

Q57. IIIrd head of coracho brachialis is known as -
a) Struthers ligament
b) Branchioradialis
c) Radial collateral ligament
d) Ulnar ligament

Q58. Nerve passing through the spiral groove of the humerus is-
a) Radial Nerve
b) Ulnar Nerve
c) Musculocutaneous Nerve
d) Interosseous Nerve

44. c	45. b	46. c	47. d	48. d	49. b	50. b, d	51. a,b,d,e	52. c,d	53. a
54. a	55. a	56. b	57. a	58. a					

Q59. The carpal tunnel contains all of the following important structures except -

a) Median Nerve.
b) Flexor pollicis longus
c) Flexor carpi radialis
d) Flexor digitorum superficialis

Q60. A 43 year old woman came with a large abscess in the middle of the right posterior triangle of the neck. The physician incised and drained the abscess. Five days later the patient noticed that she could not extend her right hand above her head to brush her hair. Which of the following are the signs and symptoms of additional harm -

a) Damage to scalenus medius
b) Injury to suprascapular nerve
c) Cut to spinal part of accessory nerve
d) Spread of infection to shoulder joint

Q61. Ligament of shoulder joint are all except –

a) Coraococlavicular
b) Glenohumoral
c) Coracohumeral
d) Transverse humeral

Q62. Winging of scapula is due to injury to:

a) Long thoracic nerve
b) Short thoracic nerve
c) Axillary nerve
d) Suprascapular nerve

Q63. Axillary sheath is derived from -

a) Prevertebral fascia
b) Clavipectoral fascia :
c) Deep layer of cervical fascia
d) Pretracheal fascia

Q64. Power grip of hand depends on

a) Short flexor of fingers
b) Lumbricals of hand :
c) Long flexors of the fingers
d) Palmaris brevis

Q65. Which of the following nerves accompanies the Profunda brachii artery

a) Ulnar
b) Musculocutaneous.
c) Radial
d) Median

Q66. All are actions of Latissimus Dorsi except -

a) External rotation of shoulder
b) Extension
c) Adduction:
d) Medial rotation

Q67. In obstruction of second part of axillay artery, the anostomosis between the following artery will maintain the blood supply of upper limb -

a) Deep branch of transverse cervical artery & subscapular artery
b) Anterior & posterior circumflex humeral
c) Posterior circumflex humeral & circumflex scapular artery
d) Suprascapular & anterior circumflex humeral artery

Q68. Movements taking place during abduction of shoulder joint are all except -(Aiims)

a) Medial rotation of scapula
b) Axial rotation of humerus at acromioclavicular joint
c) Elevation of humerus
d) Movements at clavicular end of sternoclavicular joint

Q69. Which of the following muscle is supplied by deep branch of the ulnar nerve

a) Adductor pollicis
b) Opponens pollicis
c) Abductor pollicis brevis
d) Flexor digitorum profundus

Q70. The following structures pass through the carpel tunnel except

a) Median nerve
b) Ulnar artery
c) Flexor carpi radialis tendon
d) Flexor pollicis longus tendon

Q71. What is the action of anterior fibres of deltoid ?

a) Flexion
b) Lateral rotation
c) Flexion and medial rotation
d) Extension and lateral rotation

59. c	60. c	61. a	62. a	63. a	64. c	65. c	66. a	67. a	68. a
69. a	70. b	71. c							

Q72. Fascia around nerve bundle of brachial plexus is derived from

a) Prevertebral fascia
b) Pretracheal fascia
c) Investing layer
d) Superficial cervical fascia

Q73. Contents of anatomical snuffbox are-

a) Radial artery
b) Tendon of abductor pollicis longus
c) Tendon of extensor pollicis brevis
d) Scaphoid bone Superficial cutaneous branch of radial nerve

Q74. True about pectoralis major muscle - (PGI)

a) Abductor & Internal rotator of shoulder
b) Blood supply by perforating branch of internal thoracic artery
c) Blood supply by intercostal artery
d) Nerve supply by intercostal nerve
e) Inserted into 2nd to 6th costal cartilage

Q75. Concerning brachial plexus, which of the following facts are true – (PGI)

a) Formed by spinal nerve C4-C7
b) Erb's Palsy involves upper trunk
c) Injury may occur during breech delivery
d) Radial nerve is branch of medial cord
e) Lower trunk injury results in hand deformity

Q76. First extensor compartment of wrist have which of the following structures - (PGI)

a) Extensor pollicis brevis
b) Extensor carpi radialis longus
c) Extensor carpi radialis brevis
d) Extensor digiti minimi
e) Abductor pollicis longus

Q77. Muscle supplied by median nerve- (PGI)

a) Opponens pollicis
b) Abductor pollicis brevis
c) Flexor pollicis brevis
d) First lumbricals
e) Adductor pollicis

Q78. First dorsal interosseous muscle of hand is supplied by

a) Deep branch of ulnar nerve
b) Superficial branch of ulnar nerve
c) Median nerve
d) Radial nerve

Q79. Content (s) of bicipital groove is/are (PGI)

a) Synovial membrane of shoulder jt
b) Ascending branch of anterior circumflex artery
c) Ascending branch of posterior circumflex artery
d) Radial artery
e) Coracobrachialis muscle

Q80. The following structure does not pass through Carpal Tunnel

a) Ulnar N.
b) Median N.
c) Flexor digitorum profundus
d) Flexor digitorum superficialis

Q81. All of the following muscles retract the scapula except

a) Trapezius
b) Rhomboid major
c) Rhomboid minor
d) Levator scapulae

Q82. Boundary of triangle of auscultation is not formed by –

a) Serratus anterior
b) Scapula
c) Trapezius
d) Latissimus dorsi

Q83. Axillary abscess is safely drained by which approach

a) Medial
b) Posterior
c) Lateral
d) Floor

Q84. Which amongst the following is a branch from the trunk of brachial plexus? (AI 11)

a) Suprascapular nerve
b) Long Thoracic Nerve
c) Dorsal Scapular Nerve
d) Nerve to S. Anterior

72. a	73. a	74. b	75. a	76. a,e	77. a,b,c,d	78. a
79. a,b	80. a	81. d	82. a	83. d	84. a	

Q85. Which tendon is frequently absent in upper limb -

a) Flexor carpi ulnaris
b) Flexor digitorum profundus
c) Extensor carpi radialis brevis
d) Palmaris longus

Q86. All of the following are composite muscles except-

a) Adductor magnus
b) Pectineus
c) Flexor digitorum profundus
d) Flexor digitorum superficialis

Q87. Cranial part of accessory nerve supplies –

a) Sternocleidomastoid
b) Trapezius
c) Levator scapulae
d) Levator palatini

Q88. Anterior interosseous nerve supplies All among the following except

a) Flexor pollicis longus
b) Medial part of flexor digitorum profundus
c) Lateral part of flexor digitorum profundus
d) Pronator quadratus

Q89. Boundries of upper tringular space include all except

a) Teres minor b) Teres major
c) Subscapularis d) Triceps

Q90. Froments sign is seen-

a) Ulnar nerve palsy
b) Median nerve palsy
c) Anterior interosseous nerve palsy
d) Radial nerve palsy

Q91. Muscle with dual Nerve supply:

a) FDS b) Deltoid
c) Brachialis d) FCU

Q92. Following a deep cut overlying the hypothenar emminence, it is observed that the patient cannot hold a sheet of paper between the 2nd and 3rd digits. Which of the following nerves is most likely damaged?

a) Deep branch of ulnar nerve
b) Deep branch of radial nerve
c) Superficial branch of ulnar nerve
d) Median nerve

Q93. Which ligament transfers weight from peripheral to axial skeleton?

a) Coracoclavicular ligament
b) Acromio-clavicular ligament
c) Ligament of Bigelow
d) Sterno-clavicular ligament

Q94. The term "guyon's canal" is in relation to which of the following?

a) Anterior interosseus nerve
b) Ulnar nerve
c) Median nerve
d) Radial artery

Q95. Nerve related to anatomical snuff box:

a) Ulnar
b) Median
c) Superficial branch of radial
d) Axillary

Q96. Posterior wall of axilla is not formed by :

a) Subscapularis
b) Latissimus dorsi
c) Supraspinatus
d) Teres major

Q97. All are contents of cubital fossa except -

a) Median nerve b) Biceps tendon
c) Brachial artery d) Ulnar nerve

Q98. Commonly affected nerve in anterior shoulder dislocation is-

a) Musculocutaneous nerve
b) Radial nerve
c) Axillary nerve
d) Median nerve

Q99. Not a branch of posterior cord of Brachial plexus-

a) Axillary nerve
b) Thoracodorsal nerve
c) Radial nerve
d) Long thoracic nerve

85. d	86. d	87. d	88. b	89. c	90. a	91. c	92. a	93. a	94. b	95. c
96. c	97. d	98. c	99. d							

Q100. Superficial branch of ulnar nerve supplies

a) Palmaris brevis
b) Opponens pollicis
c) Adductor pollicis
d) Abductor digiti minimi

Q101. Carpal tunnel syndrome' is caused by compression of

a) Median nerve
b) Medial cord of brachial plexus
c) Radial nerve
d) Ulnar nerve

Q102. First primary ossification centre to appear of carpal bones is -

a) Capitate b) Scaphoid
c) Triquitral d) Pisiform

Q103. Which one of the following muscles of thumb is not supplied by median nerve ?

a) Adductor pollicis
b) Flexor pollicis brevis
c) Opponens pollicis
d) Abductor pollicis brevis

Q104. Pisiform bone articulates with? (DNB)

a) Triquetral b) Lunate
c) Scaphoid d) Trapezoid

Q105. First lumbrical canal communicates with?

a) Adductor space
b) Midpalmar space
c) Thenar space
d) Hypothenar space

Q106. Anterior wall of axilla is formed by ?

a) Pectoralis major
b) Humerus
c) Latissimus dorsi
d) Teres major

Q107. In relation to other metacarpals, the first metacarpal is ?

a) Posterior
b) Anterior
c) Laterally rotated
d) Medially rotated

Q108. Interosseus membrane between radius and ulna is pierced by which structure?

a) Posterior interosseus nerve
b) Posterior interosseus artery
c) Anterior interosseus nerve
d) Anterior interosseus artery

Q109. Bursa communicating with the shoulder joint space is ?

a) Infraspinatous bursa
b) Subscapular bursa
c) Subcoracoid bursa
d) Subacromian bursa

Q110. Which branch of subclavian artery contributes to scapular anastomosis?

a) Vertebral artery
b) Internal thoracic artery
c) Thyrocervical trunk
d) Dorsal scapular artery

Q111. Nerve supply of deltoid is ?

a) Axillary b) Musculocutaneous
c) Median d) Radial

Q112. Nerve supply of trapezius is by?

a) Axillary
b) Musculocutaneous
c) Median
d) Spinal accessory nerve

Q113. Head of scapula is?

a) Coracoid process
b) Acromion process
c) Lateral angle
d) Spine

Q114. Root value of thoracodorsal nerve-

a) C5,C6,C7 b) C8,T1
c) C6,C7,C8 d) T1T2

Q115. Ulnar collateral nerve is

a) Branch of ulnar nerve
b) Branch of radial nerve supplying medial head of triceps
c) Branch of radial nerve supplying long head of triceps
d) Branch of radial nerve supplying lateral head of triceps

100.a	101.a	102.a	103.a	104.a	105. c	106.a	107.d	108.d	109.b	110. c
111.a	112.d	113.c	114.c	115.b						

Q116. Largest branch of brachial plexus is

a) Ulnar b) Median
c) Radial d) Axillary

Q117. All are infraclavicular branches of brachial plexus except

a) Ulnar nerve
b) Long thoracic nerve
c) Axillary nerve
d) Thoracodorsal nerve

Q118. Policeman's tip hand is seen in

a) Erb's palsy
b) Klumpke's paralysis
c) Axillary nerve injury
d) None of the above

Q119. Pronator teres syndrome is related to which nerve

a) Radial b) Median
c) Ulnar d) Axillary

Q120. Distal end of humerus develops from how many centres

a) 2 b) 5
c) 3 d) 4

Q121. Posterior cord supplies

a) Teres minor
b) P minor
c) Coracobrachialis
d) Long head of biceps

Q122. Which of the following movement of thumb is lost in ulnar nerve injury

a) Opposition
b) Extension
c) Adduction
d) Abduction

Q123. Corachobrachialis is pierced by which nerve

a) Axillary
b) Median
c) Musculocutaneous
d) Ulnar

Q124. Radial bursa is the synovial sheath covering the tendon of

a) FDS b) FDP
c) FPL d) FCR

Q125. Which muscle will be paralyzed when radial nerve is injured in just below the spiral groove -

a) Lateral head of triceps
b) Medial head of triceps
c) Long head of triceps
d) ECRL + Brachioradialis

Q126. Which muscle does not take part in dorsal digital expansion

a) Interossei
b) Lumbricals
c) Extensor digitorum
d) Adductor pollicis

Q127. In Forearm ulnar nerve gives muscular branch to which muscle

a) FCU b) FDP
c) Both d) None

Q128. Which muscle causes retraction of scapula -

a) Serratus anterior
b) Levator scapulae
c) Rhomboideus major
d) Supraspinatus

Q129. All are true regarding axillary lymph nodes except

a) Posterior group lies along subscapular vessels
b) Lateral group lies along lateral thoracic vessels
c) Apical group lies along axillary vessels
d) Apical group is terminal lymph nodes

Q130 All are true about mammary gland, except

a) Is a modified sweat gland
b) Extends from 2nd to 6th rib vertically
c) Supplied by internal mammary artery
d) Nipple is supplied by 6- 11 intercostal nerve

116. c	117.b	118.a	119.b	120.d	121.a	122.c	123.c	124.b	125.d	126.d
127.c	128.c	129.b	130.d							

Q131. All are contents of axilla, except –

a) Axillary tail of breast
b) Axillary vessels
c) Axillary sheath
d) Roots of brachial plexus

Q132. Bounderies of anatomical snuff box are all except

a) APL b) EPL
c) EPB d) ECU

Q133. Which of the following nerve carries fibres from all the roots of brachial plexus

a) Axillary
b) Ulnar
c) Median
d) Musculocutaneous

Q134. Branches of brachial artery are all except

a) Profunda brachii
b) Superior ulnar collateral
c) Inferior ulnar collateral
d) Radial collateral

Q135. Which muscle originates from tendon of other muscle

a) Palmaris longus
b) FCR
c) Lumbricals
d) Adductor pollicis

Q136. Flexion of metacarpophalangeal joint is produced by

a) Lumbricals
b) Dorsal interossei
c) Palmar interossei
d) All of the above

Q137. A person had injury to right upper limb he is not able to extend fingers but able to extend wrist and elbow. Nerve injured is -

a) Radial
b) Median
c) Ulnar
d) Posterior interosseus → ext. digitorum

Q138. Which of the following is not the muscles of superficial anterior compartment of forearm -

a) FDS b) FPL
c) FCR d) Palmaris longus

Q139 Nerve supply to the muscles of flexor compartment of arm

a) Radial nerve
b) Median nerve
c) Musculocutaneous nerve
d) Ulnar nerve

Q140. FDP muscle nerve supply is

a) Medial half by ulnar nerve
b) Medial half by median nerve
c) Lateral half by ulnar nerve
d) Lateral half by radial nerve

Q141. The term "Dynamic stabilizer of shoulder joint" is used for

a) Rotator cuff
b) Glenoid labrum
c) Coracohumeral ligament
d) Glenohumeral ligament

Q142. Dermatome in the thumb region is supplied by

a) C5 b) C6
c) C7 d) C8

Q143. A patient woke up from sleep with difficulty in extending fingers. He can make a grip and hold a pen. Wrist extension was possible. No sensory disturbance was found. Injury could be at

a) C8,T1
b) Posterior interosseous nerve
c) Lower part of brachial plexus
d) Hand area in motor cortex

Q144. Pisiform is which type of bone

a) Pneumatic bone
b) Sesamoid bone
c) Accessory bone
d) Long bone

131.d	132.d	133.c	134.d	135. c	136.d	137.d	138.b	139.c	140.a	141.a
142.b	143.b	144.b								

Q145. Anastomosis around the shoulder is for connection of

a) 2nd part of subclavian artery with 2nd part of axillary artery
b) 1st part of subclavian artery with 3rd part of axillary artery
c) 3rd part of subclavian artery with 1st part of axillary artery
d) 3rd part of subclavian artery with 3rd part of axillary artery

Q146. Carpometacarpal joint of thumb is -

a) Saddle
b) Hinge
c) Ball and socket
d) Pivot

Q147. Power grip of hand is due to

a) Long us Palmaris
b) Long flexors
c) Short flexors
d) Lumbricals

Q148. Which of the following arises from infraglenoid tubercle

a) Long head of biceps
b) Long head of triceps
c) Short head of biceps
d) Coracobrachialis

Q149. Carpal tunnel contains all except-

a) Median nerve
b) FDS tendon
c) FPL tendon
d) FCU tendon

Q150. Muscle in extension compartment of forearm which causes flexion of elbow

a) Brachioradialis
b) Abductor pollicis longus
c) Extensor pollicis longus
d) Extensor carpi radialis longus

Q151. Division of radial nerve occurs at which level

a) Anterior part of medial epicondyle
b) Anterior part of lateral epicondyle
c) Posterior part of medial epicondyle
d) Posterior part of lateral epicondyle

Q152. Total number of dorsal interossei

a) 2
b) 3
c) 4
d) 5

145.b	146.a	147.b	148.b	149.d	150.a	151.b	152.c

Upper Limb – Explanations

1. d. Most common site of fracture is the junction of medial 1/3rd with lateral 2/3rd

[Gray's 41st update]:- junction of medial 3/5th with lateral 2/5th is the Most common site of fracture.

Rest of the options are true statements

2. d. Upper trunk of brachial plexus involved

Lower trunk is involved in Klumpke's paralysis.

Rest of the options are true statements.

3. d. Parietal bone

Cranio facial skeleton (Parietal) show membranous ossification

Long bones show cartilaginous ossification

4. b. Ulnar nerve

It is seen in paralysis of Adductor policis supplied by ulnar nerve, patient uses Flexor policis brevis in stead of Adductor policis when asked to hold the book between Thumb and Index finger.

5. d>a

Although Nerve to Subclavius and suprascapular arise from Upper trunk but Suprascapular nerve can come from roots

6. b. Posterior interosseous nerve

Finger drop with no wrist drop is Seen in Posterior interosseous nerve injury

Finger drop WITH wrist drop is Seen in injury of Radial nerve in the radial groove

7. b. Ulnar nerve

Flexion of MCP joint and extension of IP joints is the action of Lumbricals & interossei .

FDS flexes the Proximal interphalangeal joint

8. c. Radial and musculocutaneous nerve

Read the text below

Exp: Brachialis is supplied by Radial and musculocutaneous nerve

9. b. Abduction and lateral rotation

Abduction is lost because of involvement of supraspinatus

lateral rotation is lost because of involvement of infraspinatus and teres minor

These three muscles are attached on Greater Tubercle.

Subscapularis is attached on Lesser tubercle.

Together these four muscles are part of Rotator Cuff

10. d) Teres minor

Teres minor is lateral rotator of arm and does not have any action on Elbow

Biceps, Brachialis and Brachioradialis Re flexors of Elbow

11. c. Radial nerve arises from posterior cord

a) Cervical rib involves lateral cord – False – Medial Cord is involved
b) Musculocutaneous nerve arises from medial cord – False – From Lateral cord
c) Radial nerve arises from posterior cord - True statement
d) Post fixed plexus is formed by C4,5,6,7,8 T1 – False – It is Pre fixed

12. a) Radial

Artery present in the anatomical snuff box is Radial artery

13. c) First lumbrical

First lumbrical is supplied by median nerve

14. b) Ulnar nerve

Basilic vein doesn't pierce

Strucutres piercing are:

1. Cephalic vein

2. Acromiothoracic artery
3. Lateral Pectoral nerve
4. Lymphatics

15. c. Radial and musculocutaneous nerve

Medial part of Brachialis is supplied by musculocutaneous nerve and lateral part by Radial nerve.

16. d) Posterior interosseous nerve

All extensor muscles (other than Triceps, Brachioradialis, ECRL & Anconeus which are supplied by Radial nerve) are supplied by Posterior interosseous nerve

17 c) Serratus anterior

Abduction of the shoulder

0 – 15° - Supraspinatus

15 – 90° - Deltoid (Acromial fibres)

above 90° - Trapezius & Serratus anterior

18. c) Median and ulnar nerve

Opponens policis & Opponens digiti minimi are paralyzed because of involvement of Median and ulnar nerve Following an incised wound in the front of wrist and hence the subject is unable to oppose the tips of the little finger and the thumb.

19. a) Pectoralis major

a) Pectoralis major – Attached to Clavicle and sternum for origin and Bicipital grove of humerus for insertion
b) Pectoralis minor – Attached to scapula (coracoid process) for insertion
c) Biceps brachii – Short head – Attached to scapula (coracoid process) for origin – Long head – Attached to scapula (Supraglenoid tubercle) for origin
d) Triceps – Long head – Attached to scapula (Supraglenoid tubercle) for origin

20. b. Subscapularis muscle

All given muscles belong to Rotator cuff muscles and Three of them i.e. Supraspinatus muscle

Infraspinatus muscle & Teres minor muscle are attached to the greater tubercle of the humerus, whereas Subscapularis muscle is attached to the lesser tubercle of the humerus

21. b & d

Flexor carpi ulnaris is Wrist Flexor & Extensor carpi ulnaris is wrist extensor but when they contract together they will do the Adduction similarly Carpi muscles on radial side (ECRL. ECRB & ECU)when contract together are responsible for Abduction.

22. a) Brachioradialis

a) The space around the hypothenar muscles – Midpalmar space
b) The synovial sheath for the flexor pollicis longus tendon – The Radial bursa
c) The Ulnar bursa – Common synovial sheath around long flexor tendons of fingers
d) The space around the muscles of the thenar eminence – Thenar space

23. b) Median nerve

Median nerve passes deep to flexor retinaculum and hence gets compressed in Carpal tunnel syndrome

Ulnar nerve & d) Ulnar artery pass superficial to flexor retinaculum and hence not compressed in Carpal tunnel syndrome, c) Radial nerve runs in dorsal aspect of forearm & supplies in Dorsal aspect of hand

24. d) Long head of biceps

a) Short head of biceps – Attached to coracoid process for origin
b) Coracobrachialis – Attached to coracoid process for origin
c) Pectoralis minor – Attached to coracoid process for insertion
d) Long head of biceps – Attached to scapula (Supraglenoid tubercle) for origin

25. a) Nerve to supraspinatus

a) Nerve to supraspinatus i.e. Suprascapular Nerve – Arises from Upper trunk, b) Ulnar nerve, c) Medial cutaneous nerve of arm & d) Medial cutaneous nerve of forearm – Arise from Medial cord of the brachial plexus

26. d) Orginates from lower 8 ribs

It Orginates from Upper 8 ribs, Rest options are true statements.

27. b) Seratus anterior

Boxer's muscle – Seratus anterior

Climber's muscle – Latissimus dorsi

28. b) Flat shoulder

Fracture of the surgical neck of humerus results in injury to Axillary nerve which supplies Deltoid & Teres Minor, so there will be paralysis of these muscles and Flat shoulder and Loss of sensation in the skin over a small part of the lateral upper arm (an area known as the regimental badge/patch)

29. a) Ulnar

Ulnar nerve supplies intrinsic muscles of hand which are used for fine work like playing music. Hence it is known as Musician's nerve.

30. a) Median

Median nerve supplies muscles of front of forearm which are used for Gross work. Hence it is known as Labourers nerve.

31. c) First lumbrical

First & second lumbricals are supplied by Median nerve.

32. c) Flexor digitorum profundus

Although all the muscles can flex metacarpophalangeal joint but Most important/ Prime Flexor is Flexor digitorum profundus.

33. d) Musculocutaneous

a) Radial – Radial /Spiral Groove
b) Axillary – Surgical Neck
c) Ulnar – Medial Epicondyle

34 b) Cephalic vein

Structure piercing the clavipectoral fascia are:

C – Cephalic vein
A – Acromiothoracic Artery
L – Lateral Pectoral nerve
L – Lymphatics

35. c) Formed by deep branch of ulnar Artery

a) Superficial to lumbricals – False - Deep to them
b) Lies at level of distal palmar crease - False – Proximal crease
c) Formed by deep branch of ulnar Artery – True
d) Gives 3 interdigital arteries – False - Three palmar metacarpal arteries, Three perforating arteries & Recurrent branch/branches are given off

36. c) Ulnar nerve

Muscles of the hypothenar eminence are innervated by Ulnar nerve

Most Muscles of the Thenar eminence are innervated by Median nerve

37. c) Ulnar

Ulnar Nerve is a branch of Medial cord

38. c) Abductor pollicis brevis

Abductor pollicis brevis is supplied by Median nerve.

39. a) Serratus anterior

Chest wall with Serratus anterior makes the medial wall.

40. b) Coracoid process

Clavicle, Upper border of scapula & Outer border of first rib form the boundaries to the superior entrance into the axilla.

41. a) Abductor pollicis paralysis

a) Abductor pollicis paralysis – True
b) Flexor pollicis longus paralysis – False – Supplied by the Nerve in Forearm
c) Flexor pollicis brevis paralysis – False – Deep part supplied by Ulnar nerve
d) Loss of sensation of thenar eminence – False – Palmar branch comes superficial to flexor retinaculum hence not compressed in Carpal tunnel syndrome.

42. d) 7th cervical intersegmental

Axial artery of upper limb is derived from 7th cervical intersegmental

43. c) Adduction at thumb

a) Opposition of thumb - Opponens Policis is supplied by Median n.
b) Abduction at carpometacarpal joint of thumb – Abductor Policis Longus is

supplied by Radial nerve & Abductor Policis Brevis is supplied by Median nerve

c) Adduction at thumb – Adductor Policis is supplied by Ulnar nerve.

d) Flexion of metacarpophalangeal joint of middle finger – its Long flexors are supplied by Median nerve

44. c) Suprascapular nerve

Suprascapular nerve passes through the suprascapular notch. Rest all structure may get compressed in flexion and abduction of shoulder joint.

45. b) Radial nerve

Matacarpophalangeal joints are flexed in the paralysis of Radial nerve which is known as Finger Drop.

46. c) Thoracodorsal branch of subscapular artery

Thoracodorsal branch of subscapular artery usually doesn't supply the breast; rest options supply.

47. d) Long thoracic nerve

Long thoracic nerve is Motor nerve which supplies Serratus Anterior

48. d) T7

Please remember:

Upper angle of scapula – T2

Spine of scapula – T3

Lower angle of scapula – T7

49. b) Median

Ant. dislocation of lunate leads to carpal tunnel syndrome compressing Median nerve.

50. b) Flexor carpi ulnaris & d)Extensor carpi ulnaris

Adduction of hand at wrist is done by Flexor carpi ulnaris & Extensor carpi ulnaris acting together.

Abduction of hand at wrist is done by Flexor carpi Radialis & Extensor carpi Radialis acting together.

51. a, b, d, e

Abductor pollicis brevis, Opponens pollicis, First lumbrical and superficial part of Flexor pollicis brevis is supplied by Median Nerve.

52. c, d

Small muscles of hand are supplied by C8 And T1

53. a) Adduction of the thumb

Adduction of the thumb is done by Adductor Policis which is supplied by Ulnar nerve.

54. a) Claw hand

b)Sensory loss of medial four digits – False – Medial one & Half fingers

c) Weakness of grips – False – mainly depends on long flexors which are not involved in low ulnar nerve injury

d) Inability to extend at M.C.P. joint – False – extension is done by Extensor Digitorum

55. a) Median nerve

Thenar eminence is supplied by Median nerve

56. b) Results in paralysis of anconeus muscle

Results in paralysis of anconeus muscle

57. a) Struthers ligament

IIIrd head of coracho brachialis is known as Struthers ligament

58. a) Radial Nerve

Radial Nerve & Profunda Brachii artery Pass through the spiral groove of the humerus.

59. c) Flexor carpi radialis

Flexor carpi radialis Passes under Flexor retinaculum (between Main body of Flexor retinaculum & its Deep slip on lateral aspect.)

60. c) Cut to spinal part of accessory nerve

Cut to spinal part of accessory nerve results into paralysis of Trapezius & hence Patient presents with difficulty in overhead abduction.

61. a) Corococlavicular

Glenohumoral, Coracohumeral & Transverse humeral are Ligaments of shoulder joint

62. a) Long thoracic nerve

Long thoracic nerve injury leads to paralysis of serratus anterior . Clinically patient presents with Winging of scapula on asking to push against the wall.

63. a) Prevertebral fascia

Axillary sheath is derived from Prevertebral fascia

64. c) Long flexors of the fingers

Power grip of hand depends on Long flexors of the fingers

65. c) Radial

Radial Nerve & Profunda Brachii artery Pass through the spiral groove of the humerus.

66. a) External rotation of shoulder

actions of Latissimus Dorsi are MAdE

M – Medial rotation

Ad – Adduction

E – Extension

67. a) Deep branch of transverse cervical artery & subscapular artery

In obstruction of second part of axillay artery, the anostomosis between the Deep branch of transverse cervical artery (from first part of subclavian artery) & subscapular artery (from third part of Axillary artery) will maintain the blood supply of upper limb.

68. a) Medial rotation of scapula

Movements taking place during abduction of shoulder joint involves Lateral rotation of scapula Not Medial rotation of scapula

69. a) Adductor pollicis

Adductor pollicis is supplied by deep branch of the ulnar nerve.

70. b) Ulnar artery

Ulnar artery passes over Flexor retinaculum

71. c) Flexion and medial rotation

Action of anterior fibres of deltoid is Flexion and medial rotation.

72. a) Prevertebral fascia

Fascia around nerve bundle of brachial plexus is Axillary Fascia which is derived from Prevertebral fascia.

73. a) Radial artery

Contents of anatomical snuffbox is Radial artery. Structures which are present in its roof are Cephalic vein & Superficial cutaneous branch of radial nerve.

74. b) Blood supply by perforating branch of internal thoracic artery

Action – Flexion, Adduction and Internal rotation

Nerve supply – Lateral & Medial Pectoral nerves.

75. B, C, E

a) Formed by spinal nerve C4-C7 - False - C5-T1

b) Erb's Palsy involves upper trunk - True

c) Injury may occur during breech delivery - True

d) Radial nerve is branch of medial cord - False - From Posterior cord

e) Lower trunk injury results in hand deformity - True

a) Formed by spinal nerve C4-C7 – False – C5-T1

76. a, e

First extensor compartment of wrist have Extensor pollicis brevis and Abductor pollicis longus

77. a, b, c, d

a) Opponens pollicis – Median

b) Abductor pollicis brevis – Median

c) Flexor pollicis brevis – Median

d) First lumbricals– Median

e) Adductor pollicis– Ulnar

78. a) Deep branch of ulnar nerve

First dorsal interosseous muscle of hand is supplied by Deep branch of ulnar nerve.

79. a, b

Content (s) of bicipital groove are:-

a) Synovial membrane of shoulder jt

b) Ascending branch of anterior circumflex artery

c) Long head of Biceps Brachii.

80. a) Ulnar N.

Ulnar N. passes over Flexor retinaculum through Guyon's Canal.

81. d) Levator scapulae

Trapezius, Rhomboid major & Rhomboid minor retract the scapula.

82. a) Serratus anterior

Boundary of triangle of auscultation are:
a) Latissimus dorsi
b) Scapula
c) Trapezius

83. d) Floor

Axillary abscess is safely drained along the Floor.

84. a) Suprascapular nerve

Suprascapular nerve comes from trunk. Sometimes may come from roots.

85. d) Palmaris longus

Palmaris longus is frequently absent in upper limb.

86. d) Flexor digitorum superficialis

Flexor digitorum superficialis is supplied by Median nerve only.
A) Adductor magnus – Tibial & Obturator N.
B) Pectineus – Femoral & Obturator N.
C) Flexor digitorum profundus – Median & Ulnar N.

87. d) Levator palatini

Cranial part of accessory nerve supplies palate, pharynx.

Sternocleidomastoid & Trapezius are supplied by spinal part of accessory nerve.

88. b) Medial part of flexor digitorum profundus

Anterior Interosseous Nerve (AIN)
- Origin: From median nerve between two heads of pronator teres
- Descends on the interosseous membrane
- Supplies: Muscular branches to flexor pollicis longus, Lateral ½ of flexor digitorum profundus and pronator quadratus
- Also gives articular branches to wrist, inferior radio-ulnar joint and intercarpal joints

89. c) Subscapularis

Boundries of upper tringular space include:-
a) Teres minor
b) Teres major
c) Triceps (Long head)

90. a) Ulnar nerve palsy

This test is done to test the integrity of Ulnar nerve & Adductor policis. In case of Ulnar nerve palsy, Adductor policis is paralysed and when the patient is asked to hold the book using Adductor policis between thumb & index finger, he will use Flexor policis and Froments sign is seen.

91. c) Brachialis

a) FDS – Median
b) Deltoid – Axillary
c) Brachialis – Radial & Musculocutaneous
d) FCU – Ulnar

92. a) Deep branch of ulnar nerve

Injury to Deep branch of ulnar nerve leads to paralysis of Interossei muscles. Palmar Interossei muscles paralysis leads to inability to hold a sheet of paper between the 2nd and 3rd digits.

93. a) Coracoclavicular ligament

Coracoclavicular ligament transfers weight from peripheral to axial skeleton

94. b) Ulnar nerve

The term "guyon's canal" is in relation to Ulnar nerve, which passes superficial to flexor retinaculum through this canal.

95. c) Superficial branch of radial

Superficial branch of radial is present in the roof of anatomical snuff box.

96. c) Supraspinatus

Posterior wall of axilla is formed by
a) Subscapularis
b) Latissimus dorsi
c) Teres major

97. d) Ulnar nerve

Contents of cubital fossa are the following (medial to lateral):
a) Median nerve
b) Brachial artery
c) Biceps tendon
d) Radial nerve

98. c) Axillary nerve

Axillary nerve is commonly affected nerve in anterior shoulder dislocation.

99. d) Long thoracic nerve

Long thoracic nerve arises from the roots of Brachial plexus.

100. a) Palmaris brevis

Superficial branch of ulnar nerve supplies Palmaris brevis .

101. a) Median nerve

Carpal tunnel syndrome' is caused by compression of Median nerve

102. a) Capitate

Capitate is first carpal bone to ossify and pisiform is last carpal bone to ossify.

103. a) Adductor pollicis

Adductor pollicis is supplied by ulnar nerve, not by median nerve.

104. a) Triquetral

Pisiform bone articulates with only one bone i.e. Triquetral

105. c) Thenar space

First lumbrical canal communicates with Thenar space. Hence, pus collected here can be drained by opening First lumbrical canal.

106 a) Pectoralis major

Anterior wall of axilla is formed by Pectoralis major, Pectoralis minor & Subclavius

107. d) Medially rotated

It is rotated medially through 90° so that its dorsal surface faces laterally.

108. D) Anterior interosseus artery

Anterior interosseus artery pierces Interosseus membrane between radius and ulna & reaches on posterior aspect. It is one of the content of four structures in Fourth compartment of Extensor retinaculum.

109. b) Subscapular bursa

Bursa communicating with the shoulder joint space is Subscapular bursa

110. c) Thyrocervical trunk

Thyrocervical trunk contributes to scapular anastomosis.

111. a) Axillary

Deltoid is supplied by Axillary nerve.

112. d) Spinal accessory nerve

Spinal accessory nerve supplies Sternocleidomastoid & trapezius.

113. c) Lateral angle

Head of scapula is Lateral angle or Glenoid cavity.

114. c) C6, C7, C8

Root value of thoracodorsal nerve is C6,C7,C8.

115. b) Branch of radial nerve supplying medial head of triceps

The medial muscular branches supply the medial head of the Triceps brachii. That to the medial head is a long, slender filament, which lies close to the ulnar nerve as far as the lower third of the arm, and is therefore frequently spoken of as the ulnar collateral nerve.

116. c) Radial

Largest branch of brachial plexus is Radial

117. b) Long thoracic nerve

Long thoracic nerve arises from roots and hence supraclavicular.

118. a) Erb's palsy

Policeman's tip hand is seen in Erb's palsy which is characterised by Adducted & Medially rotated arm, extended & Supinated forearm.

119. b) Median

b) Median nerve may get compressed in between two heads of Pronator

teres which is known as Pronator teres syndrome.

120. d) 4

Centers are: capitulum with the lateral part of the trochlea, the medial part of the trochlea, and one for each epicondyle. The centre for the medial epicondyle forms a separate epiphysis whereas The centres for the lateral epicondyle, capitulum and trochlea fuse around puberty and form the composite epiphysis

- About the sixteenth or seventeenth year, the lateral epicondyle and both portions of the articulating surface, having already joined, unite with the body, and at the eighteenth year the medial epicondyle becomes joined to it.

121. a) Teres minor

Teres minor is supplied by Axillary nerve which arises from posterior cord

122. c) Adduction

Adduction of thumb is done by Adductor policis which is supplied by Ulnar nerve.

123. c) Musculocutaneous

Corachobrachialis is pierced by Musculocutaneous.

124. b) FDP

Radial bursa is the synovial sheath covering the tendon of FDP.

125. d) ECRL

ECRL & Brachioradialis & rest all the extensor muscles will be paralysed when radial nerve is injured in just below the spiral groove. Only three heads of Triceps will be spared.

126. d) Adductor pollicis

Adductor pollicis does not take part in dorsal digital expansion which is formed by

127. c) Both

FCU & Medial half of FDP are supplied by Ulnar nerve

128. c) Rhomboideus major

Rhomboideus major, Rhomboideus minor & Trapezius retract the scapula.

129. b) Lateral group lies along lateral thoracic vessels

Lateral group lies along the upper part of the humerus in relation to the axillary vein

130. d) Nipple is supplied by 6- 11 intercostal nerve

Nipple is supplied by 2 – 6 intercostal nerve

131. d) Roots of brachial plexus

Roots of brachial plexus are supraclavicular and hence not the content of Axilla

132. d) ECU

Anterolaterally:
1. Tendon of abductor pollicis longus.
2. Tendon of extensor pollicis brevis.

Posteromedially: Tendon of extensor pollicis longus.

133. c) Median

Median nerve & Radial nerve carry fibres from all the roots of brachial plexus

134. d) Radial collateral

Radial collateral is branch of Profunda brachii artery.

135. c) Lumbricals

Lumbricals originates from tendon of FDP

136. d) All of the above

d) All of the above do Flexion of metacarpophalangeal joint & extension of interphalangeal joint.

137. d) Posterior interosseus

Posterior interosseus nerve injury leads to paralysis of Extensor Digitorum. Clinically patient will present with inability to extend fingers but able to extend wrist and elbow.

138. b) FPL

FPL is a muscles of deep anterior compartment of forearm.

139. c) Musculocutaneous nerve

Musculocutaneous nerve supplies to the muscles of flexor compartment of arm.

140. a) Medial half by ulnar nerve

Medial half by ulnar nerve
Lateral half by median nerve

141. a) Rotator cuff

Rotator cuff is known as "Dynamic stabilizer of shoulder joint".

142. b) C6

Dermatome in the thumb region is supplied by- C6

143. b) Posterior interosseous nerve

Posterior interosseus nerve injury leads to paralysis of Extensor Digitorum. Clinically patient will present with inability to extend fingers but able to extend wrist and elbow. Its pure motor injury so no sensory loss.

144. b) Sesamoid bone

Pisiform is Sesamoid bone

145. b) 1st part of subclavian artery with 3rd part of axillary artery

Anastomosis around the shoulder is for connection of 1st part of subclavian artery with 3rd part of axillary artery

146. a) Saddle

Carpometacarpal joint of thumb is Saddle.

147. b) Long flexors

Power grip of hand is due to Long flexors

148. b) Long head of triceps

Long head of triceps arises from infraglenoid tubercle.

149 d) FCU tendon

FCU tendon is Not a content of Carpal tunnel.

150. a) Brachioradialis

Brachioradialis is a Muscle in extension compartment of forearm which causes flexion of elbow

151. b) Anterior part of lateral epicondyle

Division of radial nerve occurs at Anterior part of lateral epicondyle.

152. c) 4

Total number of dorsal interossei, palmar interossei & lumbricals each is 4.

Lower Limb – Questions

Q1. Nerve supply of adductor magnus is through :

a) Tibial part of sciatic nerve
b) Obturator nerve
c) Both
d) None

Q2. Inversion and eversion occurs at :

a) Subtalar joints
b) Ankle joint
c) Inferior tibiofibular joint
d) All of the above

Q3. Housemaid's knee is an inflammation of :

a) Lateral patellae bursa
b) Semimembranosus bursa
c) Prepatellar bursa
d) Suprapatellar bursa

Q4. Positive Trendelenburg sign indicates of which group of gluteus muscles :

a) Gluterus Medius and Gluteus Minimus
b) Gluteus Maximus and Gluteus Minimus
c) Gluteus Maximus and Gluteus Medius
d) Gluteus Maximus, Gluteus Medius and Gluteus Minimus

Q5. Medial longitudinal arch is NOT formed by :

a) Cuboid
b) Calcaneus
c) Talus
d) Navicular

Q6. Foot drop result as a result of injury to

a) Deep peroneal nerve
b) Superficial peroneal nerve
c) Tibal nerve
d) Deltoid ligament

Q7. The strongest ligament in the body is

a) Inguinal ligament
b) Lacunar ligament
c) Ligamentum flavum
d) Iliofemoral ligament

Q8. Oblique popliteal ligament is the continuation of-

a) Semi tendinosus
b) Semimembranosus
c) Biceps femoris
d) Adductor magnus

Q9. Muscles inserted into the iliotibial tract

a) Tensor fascia lata
b) Gluteus medius
c) Vastus lateralis
d) All

Q10. A 10 year old boy taken for venesection of Great saphenous vein developed sudden pain & parasthesia on the medial aspect of great toe after givin incision over the vein & ligating it. Which of the following nerve is most likely involved in this

a) Sural nerve
b) Deep peroneal nerve
c) Medial planter nerve
d) Saphenous nerve

Q11. Talocalcaneonavicular joint is -

a) Plane
b) Ball & Socket
c) Saddle
d) Pivot

Q12. Patella completely ossify by the age of- (PG1)

a) 6 years
b) 10 years
c) 14 years
d) 21 years

Q13. Fabella is -

a) Same as fibula
b) An accessory projection from fibula
c) A sesamoid bone
d) None of the above

1. c	2. a	3.c	4. a	5. a	6. a	7. d	8. b	9. a	10. d	11. b
12. c	13. c									

Q14. Peroneus brevis is inserted to–(PGI)

a) Base of fifth metatarsal
b) Base of first metatarsal
c) Head of third metatarsal
d) Head of second metatarsal

Q15. The ischial tuberosity gives attachment to -

a) Obturator internus
b) Quadratus femoris
c) Gluteus maximus
d) Adductor magnus

Q16. The posterior division of obturator nerve innervates –

a) Hip joint
b) Knee joint
c) Adductor longus
d) Pectineus

Q17. In the region on the knee – (PGI)

a) The popliteal fossa is bounded above by tendons of the hamstring muscles and below by the two heads of the gastrocnemius muscle
b) The deepest structure in the popliteal fossa is the popliteal artery
c) The popliteal and femoral vessels are continuous through the adductor hiatus
d) The common peroneal nerve passes superficially through the central protion of popliteal fossa

Q18. The following muscles dorsiflex the foot at the ankle joint

a) Extersor digitorum brevis
b) Tibialis anterior
c) Peroneus longus
d) Flexor hallucis longus

Q19. Abduction and adduction of the forefoot occurs at

a) Subtalar joint
b) Midtarsal joint
c) Inferior tibiofibular joint
d) None

Q20. The contents of the femoral sheath is/are-

a) Femoral nerve b) Femoral vein
c) Femoral artery d) b & c

Q21. Due to bony support, the most stable position of the ankle joint is

a) Inversion b) Plantar flexion
c) Eversion d) Dorsiflexion

Q22. The longest vein in the human body is-

a) JVC b) Cephalic
c) Basilic d) Long saphenous

Q23. The following structures pass through the subsartorial canal, except the

a) Saphenous nerve
b) Femoral artery
c) Nerve to vastus intermedius
d) Femoral vein

Q24. Sartorius muscle takes origin from-

a) Pectinate line
b) Ant. Superior iliac spine
c) Body of the ileum
d) Ischial tuberosity

Q25. The keystone of the medial longitudinal arch of the foot is-

a) Calcaneum b) Cuboid
c) Talus d) Navicular

Q26. Femoral nerve does not supply –

a) Sartorius
b) Rectus femoris
c) Tensor fasciae lata
d) Articularis genu

Q27. Where does superficial femoral artery becomes the popliteal artery:

a) At apex of femoral triangle
b) At the hiatus in adductor magnus
c) Within the adductor canal
d) None of the above

Q28. Which is true of spring ligament-

a) Seen in the spine
b) Synonymus with plantar calcaneonavicular Ligament
c) Seen in hip joint
d) Seen in the knee joint

Q29. The action of popliteus muscle is to -

a) Rotate the femur laterally on the tibia
b) Rotate the femur medially on the tibia
c) Rotate the tibia laterally on the femur
d) None of the above

14. a	15. a	16. b	17. a,b,c	18. b	19. a	20. d	21. d	22. d	23. c	24. b
25. c	26. c	27. b	28. b	29. a						

Q30. Floor of the femoral triangle is formed by the following muscles, except the :

a) Pectineus
b) Adductor longus
c) Iliacus
d) Adductor brevis

Q31. Foot drop result as a result of injury to

a) Deep peroneal nerve
b) Superficial peroneal nerve
c) Tibial nerve
d) Deltoid ligament

Q32. Lateral rotators of the hip are A/E-

a) Psoas major
b) Quadratus famoris
c) Obturator internus
d) Obturator externus

Q33. The strongest ligament in the body is

a) Inguinal ligament
b) Lacunar ligament
c) Ligamentum flavum
d) Iliofemoral ligament

Q34. The flexor of the hip is-

a) Psoas major
b) Vastus medialis
c) Quadratus femoris
d) Gluteus maximus

Q35. Fascia cribrosa is related to

a) Inguinal ring
b) Femoral canal
c) Neck
d) Thigh

Q36. The peroneal artery is a branch of which artery -

a) Anterior tibial artery
b) Popliteal artery
c) Posterior tibial artery
d) Arcuate artery

Q37. Femoral canal, which is correct –

a) Smaller in female
b) Contains femoral vein
c) Inferior epigastric artery lies medially
d) Medial most compartment of femoral sheath

Q38. Extension of the hip is restricted by -

a) Iliofemoral ligament
b) Psoas
c) Gravity
d) Abductor muscles

Q39. Housemaids knee is an inflammation of the Bursae-(UPSC 89)

a) Suprapatellar
b) Semi membranosus
c) Prepatellar bursa
d) Lateral patellare

Q40. Short saphenous vein is the continuation of-

a) Medial marginal vein
b) Lateral marginal vein
c) Dorsal venous arch
d) Tibial vein

Q41. Oblique popliteal ligament is the continuation of:

a) Semi tendinosus
b) Semimembranosus
c) Biceps femoris
d) Adductor magnus

Q42. Ligament of Bigelow is present in–

a) Shoulderjoint
b) Anklejoint
c) Knee joint
d) Hip joint

Q43. In the adult, the chief arterial supply to the head of the femur is from the-

a) Superficial circumflex iliac artery
b) Obturator artery
c) Branches from the medial and lateral circumflex femoral arteries
d) Deep external pudendal artery e Inferior gluteal artery

Q44. Saphenous opening is situated-

a) Just below pubic tubercle.
b) below and lateral to pubic tubercle
c) above and medial to pubic tubercle
d) Just above pubic tubercle

Q45. Drainage of glans penis is to –

a. Deep inguinal nodes
b. Superficial inguinal nodes
c. Paraaortic
d. Iliac lymph nodes

Q46. Fabella occurs in -

a. Gastrocnemious medial head
b. Gastrocnemious lateral head
c. Tendo calcaneous
d. Soleus muscle

30. d	31. a	32. a	33. d	34. a	35. d	36. c	37. d	38. a	39. c	40. b
41. b	42. d	43. c	44. b	45. a	46. a					

Q47. Action of quadratus femoris is-
a) Extension b) Flexion
c) Lateral rotation d) Medial rotation

Q48. Not seen in adductor canal
a) Femoral artery
b) Femoral nerve
c) Saphenous nerve
d) Femoral vein

Q49. Adductor hallucis nerve supply is
a) Medial plantar nerve
b) Deep branch of medial plantar nerve
c) Deep branch of lateral plantar nerve
d) Lateral plantar nerve

Q50. Anterior cruciate ligament is attached to-
a) Medial part of anterior Intercondylar area of tibia
b) Lateral part of medial condyle of femur
c) Lateral part of lateral condyle of femur
d) Medial part of lateral condyle of femur

Q51. In children, the head of femur is supplied by all of the following arteries except -
a) Nutrient artery
b) Medial circumflex artery
c) Artery of the ligamentum teres
d) Obturator artery

Q52. Abnormal obturator artery is a branch of-
a) Internal iliac artery
b) External iliac artery
c) Obturator artery
d) Inferior epigastric artery

Q53. Muscles originating from ischial tuberosity are all except-
a) Short head of biceps
b) Adductor magnus
c) Semimembranosus
d) Semitendinosus

Q54. True about lateral meniscus –
a) It is nearly semilunar
b) It is more liable to injury
c) It's posterior surface is indented by popliteus muscle
d) Fibular collateral ligament is attached to it

Q55. Trendelenburg's sign is positive with weakness/ paralysis-
a) Gluteus maximus
b) Gluteus medius & minimus
c) Adductor longus
d) Hamstrings

Q56. Largest branch of Lumbar plexus-
a) Sciatic Nerve b) Femoral nerve
c) Obturator nerve d) Pudendal nerve

Q57. Following ligament forms the medial boundary of femoral canal-
a) Pectineal b) Lacunar
c) Pubic d) Inguinal

Q58. A 10 year old boy taken for venesection of Great saphenous vein developed sudden pain & parasthesia on the medial aspect of great toe after givin incision over the vein & ligating it. Which of the following nerve is most likely involved in this -
a) Sural nerve
b) Deep peroneal nerve
c) Medial planter nerve
d) Saphenous nerve

Q59. The Lymphatic drainage from heel and lateral lateral part of foot is to:
a) Superficial inguinal LN
b) Deep inguinal LN
c) External iliac LN
d) Popliteal LN

Q60. The following is an expansion of semimembranous tendon- (JIPMER 2002)
a) Oblique popliteal ligament
b) Tibial collateral ligament
c) Fibular collateral ligament
d) Arcuate popliteal ligament

Q61. Biceps femoris, true is -
a) Muscle of adductor compartment of thigh
b) Attached to head of fibula
c) Supplied by femoral nerve
d) Related to medial ligament of knee

47. c	48. b	49. c	50. a	51. a	52. d	53. a	54. c	55. b	56. b	57. b
58. d	59. d	60. a	61. a							

Q62. Inversion and eversion occurs at which joint:
a) Subtalar and midtarsal
b) Calcaneo navicular
c) Midtarsal
d) Calcaneocuboid only

Q63. Planter flexion is brought about by which of these muscles -
a) Soleus
b) EHL
c) Tibilis anterior
d) Peronius brevis

Q64. Lymphatic drainage of clitoris is to-
a. Para-aortic nodes
b. Superficial inguinal lymph nodes
c. Deep inguinal lymph nodes
d. Obuturator nodes

Q65. At the time of birth which of the following ossification centres are seen- (PGI)
a) Lower end of femur
b) Upper end of humerus
c) Calcaneum
d) Upper end of tibia
e) Head of humerus

Q66. Which one of the following structure passes out of the pelvis through the greater sciatic notch and re-enters through the lesser sciatic notch -
a. Ureter
b. Obturator nerve
c. Internal pudenal artery
d. Middle rectal artery

Q67. Popliteus muscle is supplied by which nerve -
a) Femoral b) Sciatic
c) Tibial d) Peronaeal

Q68. True about gluteus maximus except-
a) Supplied by superior gluteal nerve
b) Arises from coccyx, ischium
c) Insertion into iliotibial tract
d) Strong extensor

Q69. Which of the following invertors is inserted on almost all the tarsal bones except talus -
a) Tabialis anterior
b) Tibialis posterior
c) Flexor hallucis longus
d) Flexor digitorun longus

Q70. Deltoid ligament is composed of all of following parts except-
a) Tibiocalcacaneal b) Tibiotalar
c) Tibiofibular d) Tibionavicular

Q71. By pinching sartorius muscle which reflex is elicited-
a) Tendon reflex
b) Cremastric reflex
c) Bulbocavernous reflex
d) Anal reflex

Q72. When foot is off the ground the action of gluteus medius is-
a) Flexion
b) Abduction
c) Extension
d) Make the opposite hip horizontal

Q73. Lateral popliteal nerve injury can cause-
a) Loss of sensation in sole
b) Paralysis of sole muscle
c) Telepus equinovarus
d) Telipus calcanco valgus

Q74. Which of the following about medial meniscus is true-
a) More liable to injury than lateral meniscus
b) Attached to fibular collateral ligament
c) It is circular in shape
d) Wider in front

Q75. The forward displacement of the tibia is prevented by
a) Anterior cruciate ligament
b) Posterior cruciate ligament
c) Medial collateral ligament
d) Lateral collateral ligament

Q76. Spring ligament is also called –
a) Calcaneonavicular ligament
b) Calcaneocubiod ligament
c) Transverse tibiofibular ligament
d) Talocaleaneal ligament

62. a	63. a	64. c	65. a,d,c	66. c	67. c	68. a	69. b	70. c	71. b	72. d
73. c	74. a	75. a	76. a							

Q77. Major arterial supply to anterior cruciate ligament is from -

a) Medial genicular artery
b) Lateral genicular artery
c) Middle genicular artery
d) None of the above

Q78. Which one of the following arteries pierces the oblique popliteal ligament of the knee joint -

a. Medial superior genicular artery
b. Lateral superior genicular artery
c. Middle genicular artery
d. Posterior tibial recurrent artery

Q79. The cremaster muscle is innervated by which of the following nerves -

a) Genital branch of the genitofemoral nerve
b) Ilioinguinal
c) T_{12}
d) Femoral

Q80. All of the following statements concerning the sartorius muscle are correct except -

a) It is known as the "tailor's muscle"
b) It is the longest muscle in the body
c) It acts across two joints
d) It extends the hip

Q81. Which of the following nerve is NOT a branch of lumbar plexus-

a) Obturator nerve
b) Femoral nerve
c) Sciatic nerve
d) Lateral cutaneous nerve of thigh

Q82. The femoral ring is bounded by the following structures except –

a) Femoral vein
b) Inguinal ligament
c) Femoral artery
d) Lacunar ligament

Q83. Eversion of foot is produced by –

a) Tibialis anterior b) Tibialis posterior
c) Peroneus tertius d) Peroneus longus

Q84. Invertor of foot is-

a) Tibialis posterior
b) Peroneus tertius
c) Peroneus brevis
d) Gastrocnemius

Q85. About Posterior cruciate ligament - true statement is

a. Attached to the lateral femoral condyle
b. Intrasynovial
c. Prevents posterior dislocation of tibia
d. Relaxed in full flexion

Q86. Adductor canal lies beneath the-

a) Adductor longus
b) Adductor magnus
c) Sartorius
d) Vastus medialis

Q87. Posterior dislocation of the femur on the tibia is prevented by-

a) Anterior cruciate ligament
b) Posterior cruciate ligament
c) Medial collateral ligament
d) Lateral collateral ligament

Q88. In forceful inversion of foot, fracture of the tuberosity of 5th metatarsal is due to pull exerted by which tendon-

a) Peroneus longus
b) Peroneus brevis
c) Peroneus tertius
d) Extensor digitorum

Q89. Inversion / Eversion movements occurs at -

a) Ankle joints
b) Subtalar joints
c) Tibiotalar joints
d) Transverse tarsal joints

Q90. Anterior cruciate ligaments prevents

a) Anterior dislocation of femur
b) Posterior dislocation of femur
c) Anterior dislocation of tibia
d) Posterior dislocation of tibia

Q91. A young patients presented with loss of sensation in sole of foot with paralysis of medial side of plantar muscles of the foot, Most likely nerve involvement is-

a) Common peroneal nerve
b) Deep peroneal nerve
c) Superficial peroneal nerve
d) Tibial nerve

77. c	78. c	79. a	80. d	81. c	82. c	83. d	84. a	85. c	86. c	87. a
88. b	89. b	90. c	91. d							

Q92. All of the following muscles are composite muscle Except-

a) Pectineus
b) Rectus femoris
c) Adductor magnus
d) Biceps femoris

Q93. The following tendons pass under extensor retinaculum except –

a. EXTENSOR digitorumbrevis
b. Extensor hallucis
c. Tibialis anterior
d. Superficial peroneal nerve

Q94. Which passive movement causes pain in deep posterior compartment syndrome?

a) Foot abduction
b) Dorsiflexion of foot
c) Plantar flexion of foot
d) Foot adduction

Q95. Ilio femoral ligament arise from –

a) Ischial tuberosity
b) Anterior superior iliac spine
c) Iliopubic rami
d) Anterior inferior iliac spine

Q96. Superior Gluteal Nerve supplies all of the following muscles, Except –

a) Gluteus Minimus
b) Gluteus Maximus
c) Tensor fascia lata
d) Gluteus Medius

Q97. Anterior wall of inguinal canal is formed by muscles –

a) External and internal oblique
b) External, internal and transverse abdominis
c) External oblique and rectus abdominis
d) Internal oblique and transverse abdominins

Q98. All statements concerning the conjoint tendon are true, except:

a) It forms part of posterior wall of inguinal canal
b) It is the fused part of aponeurosis of transverses abdomens and internal oblique muscle
c) It is continuous with inguinal ligament
d) It may be pushed forward by direct inguinal hernia

Q99. In injury to head of fibula, all are involved except -

a) Common peroneal N.
b) Superficial peroneal N.
c) Anterior Tibial N.
d) Tibial N.

Q100. Deep peroneal nerve supplies –

a) 1st web space of foot
b) 5th web space of foot
c) Antero lateral dorsum of foot
d) Lateral part of leg

Q101. All of the following maintain the stability of ankle joint except -

a) Cruciate ligament
b) Shape of the bones
c) Tendons of muscle which cross the joint
d) Collateral ligament

Q102. What is medial most in femoral triangle -

a) Vein b) Artery
c) Nerve d) Lymph node

Q103. Gluteus medius is supplied by –

a) Superior gluteal nerve
b) Inferior gluteal nerve
c) Nerve to obturator internus
d) Nerve to quadratus femoris

Q104. Which of the following tendons passes below the sustentaculum tali -

a) Tibialis anterior
b) Tibialis posterior
c) Flexor digitorum longus
d) Flexor hallucis longus

Q105. Which of the following tendons has attachments on sustentaculum Tali

a) Tibialis anterior
b) Tibialis posterior
c) Flexor digitorum longus
d) Flexer hallucis longus

Q106. Foot drop results as a result of injury to -

a) Deep peroneal nerve
b) Superficial peroneal nerve
c) Tibial nerve
d) Deltoid ligament

92. b	93. d	94. b	95. d	96. b	97. a	98. c	99. d	100.a	101.a	102.d
103.a	104.d	105.b	106.a							

Q107. Which of the following forms the tendinous sling in the lateral arch of foot?

a) Peroneus longus and peroneus brevis
b) Peroneus brevis
c) Peroneus longus and tibialis posterior
d) Peroneus brevis and tibialis posterior

Q108. Feature seen in common peroneal nerve injury-

a) Inversion inability
b) Loss of sensation of sole
c) Foot drop
d) Loss of extension of great toe
e) Seen in Fibular neck #

Q109. Arterial supply to the head and neck of femur is -

a) Lateral circumflex femoral artery
b) Medial circumflex femoral artery
c) Profunda femoris artery
d) External femoral artery

Q110. What is the root value of the posterior cutaneous nerve of the thigh?

a) SI, S2 b) SI, S2, S3
c) S2, S3 d) S2, S3, S4

Q111. Extensor hallucis longus is supplied by -

a) Superficial peroneal nerve
b) Deep peroneal nerve
c) Tibial nerve
d) Sciatic nerve

Q112. Anterior compartment of leg contains all except-

a) Peroneus brevis
b) Tibialis anterior
c) External hallucis longus
d) External digitalis longus

Q113. The nutrient artery to the femur is -

a) Profunda femoris artery
b) Femoral artery
c) Popliteal artery
d) Middle circumflex femoral artery

Q114. Nutrient artery arises to fibula from-

a) Peroneal artery
b) Anterior tibial artery
c) Posterior tibial artery
d) Popliteal artery

Q115. Course of the great saphenous vein lies in what relation to the malleoli?

a) Anterior to the medial malleolus
b) Posterior to the medial malleolus
c) Anterior to the lateral malleolus
d) Posterior to the lateral malleolus

Q116. All are contents of femoral sheath except-

a) Femoral artery
b) Femoral nerve
c) Femoral vein
d) Genitofemoral nerve

Q117. Conjoint tendon is formed by-

a) External oblique, internal oblique
b) External oblique, transversus abdominis
c) Internal oblique, transversus abdominis
d) all three

Q118. Major function of gluteus medius & minimus at hip joint is-

a) Flexion b) Extension
c) Abduction d) Adduction

Q119. Root value of sciatic nerve - (NBE based NEET 2012-13)

a) S,S_2S_3 b) L_4L_5S,S_2S_3
c) L,L_2L_3 d) $L_2L_3L_4$

Q120. Safe Site of injection in gluteus Maximus -

a) Inferomedial
b) Superomedial
c) Superolateral
d) Superomedial

Q121. Major flexor of hip joint -

a) Psoas major
b) Gluteus maximus
c) TFL
d) Hamstring

107.a	108.c,d,e	109.b	110.b	111.b	112.a	113.a	114.a	115.a	116.b	117.c
118.c	119.b	120.c	121.a							

Q122. Trendelenburg sign is due to paralysis of -

a) Gluteus maximus
b) Gluteus medius
c) Pyriformis
d) Obturatior ext.

Q123. Inguinal ligament forms the boundries of -

a) Femoral triangle
b) Hesselbach's triangle
c) Both
d) None

Q124. Length of inguinal canal -

a) 2.5 cm b) 4cm
c) 10 cm d) 15 cm

Q125. Deltoid ligament is attached to all except -

a) Medial malleolus
b) Talus
c) Calcaneum
d) Lateral malleolus

Q126. Flexor of hip joint are all except-

a) Psaoas major
b) Sartorius
c) Gluteus maximus
d) Rectus femoris

Q127. Tibial nerve supplies all except -

a) Gastrocnemius
b) Plantaris
c) Peroneus longus
d) Tibialis posterior

Q128. Which of the following ligaments is derived from the tendon of semimembranosus ?

a) Oblique popliteal ligament
b) Fibular ligament
c) Medial collateral ligament
d) Ligamentum patellae

Q129. The common peroneal nerve can be rolled against the following part of the fibula-

a) Styloid process
b) Head
c) Neck
d) Shaft

Q130. Following tarsal bone is devoid of muscular attachment-

a) Talus
b) Navicular
c) Cuboid
d) Medial cuneiform

Q131. Which one of the following is true regarding spring ligament

a) Synonymous with plantar calcaneonavicular ligament
b) Synonymous with iliofemoral ligament
c) Associated with Knee joint
d) Associated with spine

Q132. Skin of dorsum of first web space of foot is supplied by-

a) Sural nerve
b) Saphenous nerve
c) Deep peroneal nerve
d) Lateral plantar nerve

Q133. True about adductor hiatus is?

a) Opening in aponeurosis of adductor magnus
b) Lies close to adductor tubercle
c) Important vessels pass through it
d) All of the above

Q134. Articularis genu is related to? (DNBAug 13 Pattern)

a) Vastus lateralis
b) Vastus intermedius
c) Vastus medialis
d) Rectus femoris

Q135. Ligaments for antero-posterior stability of knee is?

a) Cruciate ligaments
b) Medial collateral ligament
c) Lateral collateral ligament
d) Patellar ligaments

Q136. Most stable position ankle is

a) In plantar flexion
b) In dorsiflexion
c) In inversion
d) In eversion

122.b	123.c	124.b	125.d	126.c	127.c	128.a	129.c	130.a	131.a	132.c
133.d	134.b	135.a	136.b							

Q137. Structure which passes through greater sciatic foramen is? (DNB Nov 13 Pattern)

a) Superior gluteal nerve and vessels
b) Tendon of obturator internus
c) Anterior cutaneous nerve of thigh
d) Semimembranosus tendon

Q.138. Structure which passes through both greater and lesser sciatic foramen? (DNB Nov 13 Pattern)

a) Nerve to quadratus femoris
b) Superior gluteal nerve
c) Nerve to obturator internus
d) Piriformis muscle

Q139. All are true about popliteal fossa except - (DNB Nov 13 Pattern)

a) The popliteal fossa is bounded above by tendons of the hamstring muscles and below by two heads of the gastronemius muscle
b) The deepest structure in the popliteal fossa is the popliteal artery
c) The popliteal and femoral vessels are continuous through the adductor hiatus
d) The common peroneal nerve passes superficially through the central portion of popliteal fossa

Q140. True about the anatomy of great saphenous vein -

a) Starts as a continuation of lateral marginal vein
b) Ends in femoral vein
c) There are 2-5 valves below the knee
d) Ascends 2.5 - 3 cm behind tibial malleolus

Q141. Muscle attached to navicular tuberosity is ? (DNB Nov 13 Pattern)

a) Tibialis anterior
b) Tibialis posterior
c) Peroneous longus
d) Extensor hallucis longus

Q142. True about femoral nerve are all except :

a) Lies outside femoral sheath
b) Saphenous is largest cutaneous branch
c) Supplies Quadriceps femoris
d) Root value L2-L5

Q143. All are contents of femoral triangle except –

a) (NBE based AI 13 Pattern)
b) Femoral artery
c) Femoral vein
d) Superficial inguinal lymph nodes
e) Nerve to pectineus

Q144. Muscle attached to lateral surface of greater trochanter -

a) Gluteus maximus
b) Gluteus medius
c) Gluteus minimus
d) Piriformis

Q145. Neurovascular bundle of anterior compartment of leg passes between the tendons of –

a) EHL and EDL
b) EDL and peroneus tertius
c) Tibialis anterior and EHL
d) None of the above

Q146. Line from midinguinal point to adductor tubercle represent -

a) Inferior epigastric artery
b) Femoral artery
c) Superior epigastric artery
d) None of the above

Q147. Which of the following is not supplied by posterior division of obturator nerve? (APPG 08)

a) Obturator externus
b) Obturator internus
c) Adductor magnus
d) Both a and c

Q148. Lower end of femur is ossified from how many ossification centers - (NBE based AI 13 Pattern)

a) 1 b) 2
c) 3 d) 4

Q149. First layer of sole has-

a) Abductor hallucis
b) Flexor hallucis longus
c) Flexor hallucis brevis
d) Adductor hallucis

First layer of sole has Abductor hallucis

Q150. Meralgia paraesthesia is due to entrapment of which nerve -

a) Medial cutaneous nerve of arm
b Lateral cutaneous nerve of thigh
c) Ilioinguinal nerve
d) Tibial nerve

137.a	138.c	139.a	140.b	141.b	142.d	143.d	144.b	145.a	146.b	147.b
148.a	149.a	150.b								

Lower Limb – Explanations

1. c) both

Adductor magnus is hybrid / composite muscle and is supplied by Both

2. a) subtalar joint

Read the text below

These occur at subtalar joint

3. c) Prepatellar bursa

It is inflammation of Prepatellar bursa

Clergymen knee is inflammation of infrapatellar bursa

4. a) Gluterus Medius and Gluteus Minimus

This is done to check the integrity of Gluterus Medius and Gluteus Minimus and their nerve supply ie superior gluteal nerve.

5. a) Cuboid

Cuboid is part of lateral longitudinal arch only

6. a) Deep peroneal nerve

Foot drop result as a result of injury to Deep peroneal nerve

It can be seen as a result of injury to common peroneal nerve as well but in that case there will be loss of eversion also.

7. d) Iliofemoral ligament

The strongest ligament in the body is Iliofemoral ligament

8. b) Semimembranosus

Oblique popliteal ligament is the continuation of Semimembranosus

9. a) Tensor fascia lata

Tensor fascial lata & Gluteus maximus are inserted in Iliotibial tract

10. d) Saphenous nerve

Read the text below

Saphenous nerve will be injured which accompanies Great Saphenous vein

11. b) Ball & Socket

Read the text below

Talocalcaneonavicular joint is Ball & Socket

12. c) 14 years

The patella ossifies from several centres which appear during 3–6 years and fuse quickly to form a single centre. The ossification of patella is completed at puberty.

13. c) A sesamoid bone

Fabella is a sesamoid bone developing in the tendon of Gastrocnemius.

14. a) Base of fifth metatarsal

Peroneus brevis is inserted to Base of fifth metatarsal

Peroneus longus is inserted to Base of first metatarsal.

15. a) Adductor magnus

The ischial tuberosity gives attachment to Hamstring muscles including Adductor magnus

16. b) Knee joint

The posterior division of obturator nerve innervates Knee joint

The antterior division of obturator nerve innervates Hip joint

17. A, B, C

The common peroneal nerve appears in the popliteal fossa beneath the long head of the biceps femoris and slopes downward and laterally along the medial side of the tendon of biceps femoris up to the lateral angle of the fossa. Here it crosses superficial to the plantaris, lateral head of gastrocnemius to reach the back of the head of fibula.

18. B. Tibialis anterior

Tibialis anterior dorsiflex the foot at the ankle joint

19. a) Subtalar joint

Abduction and adduction(inversion & eversion) of the forefoot occurs at Subtalar joint

20. d) b & c

Femoral vein & artery are contents of the femoral sheath whereas Femoral nerve lies outside it.

21. d) Dorsiflexion

Dorsiflexion is close packed position & Due to bony support, it is the most stable position of the ankle joint.

22. d) Long saphenous

Long saphenous is the longest vein in the human body.

23. c) Nerve to vastus intermedius

Nerve to vastus medialis is a content Not Nerve to vastus intermedius.

24. b) Ant. Superior iliac spine

Sartorius muscle takes origin from Ant. Superior iliac spine

Action: Flexion of the hip and knee joints

- Lateral rotation of the thigh

25. c) Talus

The keystone of the medial longitudinal arch of the foot is Talus

26. c) Tensor fasciae lata

Tensor fasciae lata is supplied by Sup. Gluteal N.

27. b) At the hiatus in adductor magnus

Superficial femoral artery becomes the popliteal artery at the hiatus in adductor magnus

28. b) Synonymus with plantar calcane-onavicular Ligament

Spring ligament is Synonymus with plantar calcaneonavicular Ligament

29. a) Rotate the femur laterally on the tibia

The action of popliteus muscle is to Unlock: which is done by rotating the femur laterally on the tibia at the beginning of flexion of knee.

30. d) Adductor brevis

Usually Floor of the femoral triangle is formed by the following muscles:

a) Pectineus
b) Adductor longus
c) Iliacus
d) Psoas major

31. a) Deep peroneal nerve

Deep peroneal nerve supplies Anterior compartment of leg, its injury leads to loss of dorsiflexion i.e. foot drop.

32. a) Psoas major

Psoas major is a flexor of hip

33. d) Iliofemoral ligament

Iliofemoral ligament is the strongest ligament in the body.

34. a) Psoas major

a) Psoas major – flexor of the hip
b) Vastus medialis – Extensor of the knee
c) Quadratus femoris – Lateral rotator of the hip
d) Gluteus maximus– Extensor of the hip

35. d) Thigh

The cribriform fascia, fascia cribrosa also Hesselbach's fascia is the portion of fascia covering the saphenous opening in the thigh.

36. c) Posterior tibial artery

The peroneal artery is a branch of Posterior tibial artery, sometimes it may arise from Popliteal artery.

37. d) Medial most compartment of femoral sheath

a) Smaller in female – False – wider
b) Contains femoral vein– False – lymph node
c) Inferior epigastric artery lies medially – False – lacunar ligament
d) Medial most compartment of femoral sheath – true

38. a) Iliofemoral ligament

Extension of the hip is restricted by Iliofemoral ligament .

39. c) Prepatellar bursa

Housemaids knee is an inflammation of the Prepatellar bursa

Clergymen knee is an inflammation of the infrapatellar bursa

40. b) Lateral marginal vein

Short saphenous vein is the continuation of Lateral marginal vein

41. B) Semimembranosus

Oblique popliteal ligament is the continuation of Semimembranosus

42. d) Hip joint

Ligament of Bigelow (Iliofemoral ligament) is present in Hip joint

43. c) Branches from the medial and lateral circumflex femoral arteries

Chief arterial supply to the head of the femur is from the Branches from the medial and lateral circumflex femoral arteries

44. b. below and lateral to pubic tubercle

Saphenous opening is situated below and lateral to pubic tubercle

45. a) Deep inguinal nodes

Drainage of glans penis is to Deep inguinal nodes

46. a) Gastrocnemious medial head

Fabella occurs in Gastrocnemious medial head

47. c) Lateral rotation

Action of quadratus femoris is Lateral rotation

48. b) Femoral nerve

Femoral nerve is not seen in adductor canal

49. c. Deep branch of lateral plantar nerve

Adductor hallucis is supplied by Deep branch of lateral plantar nerve

50. a) Medial part of anterior Intercondylar area of tibia

Anterior cruciate ligament is attached to Medial part of anterior Intercondylar area of tibia

51. a) Nutrient artery

52. d) Inferior epigastric artery

Abnormal obturator artery is a branch of Inferior epigastric artery

53. a) Short head of biceps

Short head of biceps originates from linea aspera of femur.

54. c) It's posterior surface is indented by popliteus muscle

a) It is nearly semilunar – False – nearly circular

b) It is more liable to injury – False – less liable

c) It's posterior surface is indented by popliteus muscle – true

d) Fibular collateral ligament is attached to it – False – not attached

55. b) Gluteus medius & minimus

Gluteus medius & minimus paralysis leads to instability of pelvis on unsupported side

56. b) Femoral nerve

Largest branch of Lumbar plexus is Femoral nerve

57. b) Lacunar

Lacunar ligament forms the medial boundary of femoral canal. This is extension of inguinal ligament.

58. d) Saphenous nerve

Saphenous nerve follows Great saphenous vein & is most likely involved in venesection of Great saphenous vein.

59. d) Popliteal LN

The Lymphatic drainage from heel and lateral lateral part of foot is to Popliteal LN (along short saphenous vein)

60. a) Oblique popliteal ligament

Oblique popliteal ligament is an expansion of semimembranous tendon.

61. a) Muscle of adductor compartment of thigh

Biceps femoris is muscle of adductor compartment of thigh, supplied by obturator nerve & Tibial division of sciatic nerve.

62. a) Subtalar and midtarsal

Inversion and eversion occurs at Subtalar and midtarsal

63. a) Soleus

Planter flexion is brought about by Soleus

Dorsiflexion is brought about by EHL & Tibialis anterior

Eversion is brought about by Peronius brevis

64. c) Deep inguinal lymph nodes

Lymphatic drainage of clitoris is to Deep inguinal lymph nodes.

65. a) Lower end of femur
d) Upper end of tibia
c) Calcaneum

Lower end of femur & Upper end of tibia ossify just before or at birth

c) Calcaneum

66. c) Internal pudenal artery

Internal pudenal artery passes out of the pelvis through the greater sciatic notch and re-enters through the lesser sciatic notch

67. c) Tibial

Popliteus muscle is supplied by Tibial.

68. a) Supplied by superior gluteal nerve

it is Supplied by inferior gluteal nerve

69. b) Tibialis posterior

Tibialis posterior is inserted on almost all the tarsal bones except talus

70. c) Tibiofibular

Deltoid ligament is composed of all of following:

a) Tibiocalcacaneal
b) Tibiotalar
c) Tibionavicular

71. b) Cremastric reflex

This reflex is elicited by lightly stroking or poking the superior and medial (inner) part of the thigh— The normal response is an immediate contraction of the cremaster muscle that pulls up the testis ipsilaterally.

Bulbocavernous reflex : The test involves monitoring internal/external anal sphincter contraction in response to squeezing the glans penis or clitoris, or tugging on an indwelling Foley catheter

72. d) Make the opposite hip horizontal

When foot is off the ground the action of gluteus medius is Make the opposite hip horizontal

73. c) Telepus equinovarus

Lateral popliteal nerve (Common peroneal) injury leads to foot drop & loss of evrsion which clinically presents as Telepus equinovarus.

74. a. More liable to injury than lateral meniscus

Medial meniscus is more liable to injury than lateral meniscus.

75. a) Anterior cruciate ligament

Anterior cruciate ligament prevents forward displacement of the tibia & also backward displacement of the femur.

76. a) Calcaneonavicular ligament

Spring ligament is also called plantar Calcaneonavicular ligament

77. c) Middle genicular artery

Major arterial supply to anterior cruciate ligament is from Middle genicular artery

78. c) Middle genicular artery

Middle genicular artery pierces the oblique popliteal ligament of the knee joint

79. a) Genital branch of the genitofemoral nerve

Genital branch of the genitofemoral nerve supplies the cremaster, dartos muscle and gives a few filaments to the skin of the scrotum. In females, it accompanies the round ligament of the uterus, where it terminates as the nerve supplying skin to the labia majora and mons pubis.

80. d. It extends the hip

Sartorius flexes the Hip

81. c) Sciatic nerve

Sciatic nerve is a branch of sacral plexus

82. c) Femoral artery

Femoral artery is not a boundary of Femoral ring

83. d) Peroneus longus

Peroneus longus & Peroneus brevis produce Eversion of foot.

84. a) Tibialis posterior

Tibialis posterior & Tibialis anterior are invertors of foot.

85. c) Prevents posterior dislocation of tibia

Posterior cruciate ligament Prevents posterior dislocation of tibia & anterior dislocation of femur.

86. c) Sartorius

Adductor canal lies beneath the Sartorius, hence it is known as subsartorial canal.

87. a) Anterior cruciate ligament

Anterior cruciate ligament prevents:

Posterior dislocation of the femur on the tibia

Anterior dislocation of the tibia on the femur

88. b) Peroneus brevius

In forceful inversion of foot, fracture of the tuberosity of 5th metatarsal is due to pull exerted by Peroneus brevis

89. b) Subtalar joints

Inversion / Eversion movements occurs at Subtalar joints

90. c) Anterior dislocation of tibia > b. Posterior dislocation of femur

Anterior cruciate ligaments prevents Anterior dislocation of tibia and Posterior dislocation of femur

a) Common peroneal nerve
b) Deep peroneal nerve
c) Superficial peroneal nerve
d) Tibial nerve

91. d) Tibial nerve

Tibial nerve divides into mdedial & lateral plantar nerve which supply muscles and skin of the sole.

92. b) Rectus femoris

a) Pectineus – Femoral & Obtrurator nerve
b) Rectus femoris – Femoral nerve
c) Adductor magnus – Tibial & Obtrurator nerve
d) Biceps femoris: Short head –common peroneal nerve
Long head – Tibial nerve

93. d) Superficial peroneal nerve

Superficial peroneal nerve is a nerve of lateral compartment of leg.

94. b) Dorsiflexion of foot

Dorsiflexion of foot will cause passive extension of tendons of posterior compartment and such passive movement causes pain in deep posterior compartment syndrome.

95. d) Anterior inferior iliac spine

Ilio femoral ligament arise from Anterior inferior iliac spine

96. b) Gluteus Maximus

Gluteus Maximus is supplied by Inferior Gluteal nerve.

97 a) External and internal oblique

External and internal oblique makes Anterior wall of inguinal canal.

98. c) It is continuous with inguinal ligament

It is not continuous with inguinal ligament

99. d) Tibial N.

In injury to head of fibula, nerves involved are:

- Common peroneal N., Superficial peroneal N. and Anterior Tibial N. (Deep peroneal N.)

100. a) 1st web space of foot

Deep peroneal nerve supplies 1st web space of foot

101. a) Cruciate ligament

Rest all options maintain the stability of ankle joint

102. d) Lymph node

Lymph node lies in medial most position in femoral triangle

103. a) Superior gluteal nerve

Gluteus medius & Minimus are supplied by Superior gluteal nerve

Gluteus maximus is supplied by Inferior gluteal nerve.

104. d) Flexor hallucis longus

Flexor hallucis longus passes below the sustentaculum tali.

105. b) Tibialis posterior

Tibialis posterior tendons has attachments on sustentaculum Tali

106. a) Deep peroneal nerve

Foot drop results as a result of injury to Deep peroneal nerve because this nerve supplies extensor group of muscles.

107. a) Peroneus longus and peroneus brevis

Peroneus longus and peroneus brevis forms the tendinous sling in the lateral arch of foot

108. c) Foot drop
d) Loss of extension of great toe
e) Seen in Fibular neck #

109. b. Medial circumflex femoral artery

Arterial supply to the head and neck of femur is Medial circumflex femoral artery & Lateral circumflex femoral artery but Dominant is Medial circumflex femoral artery

110. b) SI, S2, S3

Root value of the posterior cutaneous nerve of the thigh SI, S2, S3

111. b) Deep peroneal nerve

Deep peroneal nerve supplies anterior compartment of leg including Extensor hallucis longus.

112. a) Peroneus brevis

Peroneus brevis belongs to Lateral compartment of leg

113. a) Profunda femoris artery

2nd perforator of Profunda femoris artery

114. a) Peroneal artery

Nutrient artery arises to fibula from Peroneal artery

115. a) Anterior to the medial malleolus

Great saphenous vein lies 1 inch Anterior to the medial malleolus

116. b) Femoral nerve

Femoral nerve is Not a content of femoral sheath.

117. c) Internal oblique, transversus abdominis

Fibres of Internal oblique, transversus abdominis fuse together to form Conjoint tendon.

118. c) Abduction

Major function of gluteus medius & minimus at hip joint is Abduction & medial rotation.

119. b) L_4L_5S,S_2S_3

Root value of sciatic nerve is L_4L_5S,S_2S_3

120. c) Superolateral

Safe Site of injection in gluteus Maximus Superolateral

121. a) Psoas major

Major flexor of hip joint

Psoas major

122. b) Gluteus medius

Trendelenburg sign is due to paralysis of Gluteus medius

123. c) Both

a) Femoral triangle – Inguinal ligament, Sartorius, Adductor longus.

b) Hesselbach's triangle – Inguinal ligament, Rectus abdominis, inferior epigastric artery.

124. b) 4cm

Length of inguinal canal 4cm

125. d) Lateral malleolus

Deltoid ligament is attached to Tibia (Medial malleolus), Talus, Calcaneus & Navicular

126. c) Gluteus maximus

Gluteus maximus is extensor of hip joint

127. c) Peroneus longus

Peroneus longus is supplied by Superficial peroneal nerve.

128. a) Oblique popliteal ligament

Oblique popliteal ligament is derived from the tendon of semimembranosus

129. c) Neck

The common peroneal nerve can be rolled against the Neck of the fibula

130. a) Talus

Talus is devoid of muscular attachment.

131. a) Synonymous with plantar calcaneonavicular ligament

Spring ligament is Synonymous with plantar calcaneonavicular ligament

132. c) Deep peroneal nerve

Skin of dorsum of first web space of foot is supplied by Deep peroneal nerve
Rest of Skin of dorsum of foot is supplied by Superficial peroneal nerve

133. d) All of the above

Femoral vessels pass through it & continue as popliteal vessels.

134. b) Vastus intermedius

Articularis genu is detached part of Vastus intermedius

135. a) Cruciate ligaments

Ligaments for antero-posterior stability of knee is Cruciate ligaments

136. b) In dorsiflexion

Most stable position ankle is in dorsiflexion

137. a) Superior gluteal nerve and vessels

Superior gluteal nerve and vessels pass through greater sciatic foramen

138. c) Nerve to obturator internus

Pudendal nerve, Internal pudendal artery & Nerve to obturator internus pass through both greater and lesser sciatic foramen

139. a) The common peroneal nerve passes superficially through the central portion of popliteal fossa

The Sciatic & Tibial nerve passes superficially through the central portion of popliteal fossa

140. b) Ends in femoral vein

a) Starts as a continuation of medial marginal vein
c) There are about 10 to 20 valves in the great saphenous vein,
d) Ascends 2.5 - 3 cm infront of tibial malleolus

141. b) Tibialis posterior

The tibialis posterior is the only muscle that attaches to the navicular bone

142. d) Root value L2-L5

Root value of femoral nerve is L2-L4.

143. d) Nerve to pectineus

Nerve to pectineus is given off from above the inguinal ligament.

144. b) Gluteus medius

Gluteus medius is attached to lateral surface of greater trochanter

145. a) EHL and EDL

In the upper one-third of the leg it lies between the tibialis anterior and extensor digitorum longus.
In the middle one-third of the leg it lies between the tibialis anterior and extensor hallucis longus.
In the lower one-third of the leg it lies between extensor hallucis longus and extensor digitorum longus.
Tendons are present in lower one third only so answer should be a.EHL and EDL

146. b) Femoral artery

Line from midinguinal point to adductor tubercle represent Femoral artery

147. b) Obturator internus

Obturator internus is supplied by Nerve to Obturator internus

148. a) 1

The femur ossifies from five centres: one primary and four secondary centres. The primary centre appears in the midshaft. Three secondary centres appear in the upper end and one secondary centre in the lower end.

149. a) Abductor hallucis

First layer of sole has Abductor hallucis

150. b) Lateral cutaneous nerve of thigh

Meralgia paraesthesia is due to entrapment of Lateral cutaneous nerve of thigh

Q14. Left superior intercostal vein drains into-

a) Azygous vein
b) Hemi azygous vein
c) Innominate vein
d) Left branchiocephalic vein

Q15. Fossa ovalis closes because of fussion of-

a) Septum primum + Endocardial cushion
b) Septum secundum + Endocardial cushion
c) Septum primum + Septum secundum
d) Septum primum + Ostium Primum

Q16. SA node is located -

a) Epicardially b) Intramyocardial
c) Subepicardially d) Endocardially

Q17. Which of the following about parietal pleura is correct-

a) Supplied by vagus N
b) Sensitive to pain
c) Derived from splanchnopleural layer of lateral plate mesoderm
d) Extends upto T2

Q18. All the following veins drain into coronary sinus except-

a) Great cardiac vein
b) Middle cardiac vein
c) Small cardiac vein
d) Anterior cardiac vein

Q19. Oesophagus receives blood supply from all except -

a) Interior Thyroid artery
b) Inferior phrenic artery
c) Internal mammary artery
d) Bronchial artery

Q20. The oblique sinus of pericardium lies-

a) Behind the left atrium
b) Behind the ascanding aorta
c) Behind the SVC
d) Anterior to pulmonary trunk

Q21. Length of trachea -

a) 10-12 cm b) lcm-10 cm
c) 15 cm d) 22.5 cm

Q22. Blood supply of lungs are-

a) Pulmonary artery
b) Pulmonary vein
c) Bronchial artery
d) Intercostal artery
e) Internal thoracic artery

Q23. True statements about esophageal hiatus -

a) Lies between two crura of diaphragm
b) At the level of D_{12} vertebra
c) Vagus nerve passes through it
d) Lie in rt. crura of diaphragm
e) Thoracic duct passes through it

Q24. Branches of R.C.A. (Rt. Coronary artery)

a) Obtuse marginal
b) Acute marginal
c) Posterior interventricular
d) Diagonal, e) Posterior ventricular

Q25. Bronchial artery supplies upto –

a) Terminal bronchiole
b) Respiratory bronchiole
c) Alveolus
d) Secondary bronchus

Q26. The commonest variation in the arteries arising from the arch of aorta is -

a) Absence of brachiocephalic trunk
b) Left vertebral artery arising from the arch
c) Left common carotid artery arising from brachiocephalic trunk
d) Presence of retroesophageal subclavian artery

Q27. The lumbar region of the vertebral column permits all of the following movements except -

a) Flexion b) Extension
c) Lateral flexion d) Rotation

Q28. The middle cardiac vein is located at the -

a) Anterior interventricular sulcus
b) Posterior interventricular sulcus
c) Posterior AV groove
d) Anterior AV groove

14. d	15. c	16. c	17. b	18. d	19. b	20. a	21. a
22. a,b,c	23. c,d	24. b,c,e	25. b	26. c	27. d	28. b	

Q29. In angina pectoris, the pain radiating down the left arm is mediated by increased activity in afferent (sensory) fibers contained in the -

a) Carotid branch of the glossopharyngeal nerve
b) Phrenic nerve
c) Vagus nerve and recurrent laryngeal nerve
d) Thoracic splanchnic nerve

Q30. Autonomic supply to S.A node is

a) Parasympathetic excitatory
b) Sympathetic excitatory
c) Both excitatory
d) Both inhibitory

Q31. The stability of the vertebral column is due to -

a) Vertebra and vertebral discs
b) Interspinous ligaments
c) Paraspinal muscle
d) All

Q32. The esophagus -

a) Begins at the upper border of cricoid carlotilage
b) Runs a straight course throughout
c) Is narrowest at its termination
d) Is narrowest at its begining

Q33. Left superior intercostal vein drains into-

a) Azygous vein
b) Hemi azygous vein
c) Innominate vein
d) Left branchiocephalic vein

Q34. The arch of aorta lies in the mediastinum -

a) Posterior b) Anterior
c) Middle d) Superior

Q35. The base of the heart is formed by the-

a) Right atrium b) Left atrium
c) Left ventricle d) Right ventricle

Q36. Which of the following is correct regarding SA node-

a) It is supplied by left coronary artery mainly
b) Generates an impulse at the rate of about 70/min and initiates the heart beat
c) Situated in left atrium
d) Part of valves

Q37. All of the following are true regarding heart except-

a) Coronary sinus opens into right atrium
b) Vena cardie minimi drains into surface of heart
c) SA node is supplied by Right coronary artery
d) Left auricle projects anteriorly to overlap the infundibulum of the right ventricle

Q38. Occlusion of the LAD will lead to infarction of which area-

a) Posterior part of the interventricular septum
b) Anterior wall of the left ventricle
c) Lateral part of the heart
d) Inferior surface of right ventricle

Q39. Which of the following do NOT elevate the ribs -

a) Serratus posterior superior
b) Serratus posterior inferior
c) External intercostals
d) Levatores costarum

Q40. Superior intercostal artery is a branch of

a) Costocervical trunk
b) Dorsal scapular artery
c) Thyrocervical trunk
d) Internal thoracic artery

Q41. Anterior intercostal artery is branch of

a) Internal mammary artery
b) Direct branch of aorta
c) Posterior intercostal artery
d) Subclavian artery

Q42. All of the following structures pass through the superior aperture of thorax except

a) Right recurrent laryngeal nerve
b) Left common carotid artery
c) Left sympathetic trunk
d) Thoracic duct

29. d	30. b	31. d	32. d	33. d	34. d	35. a,b	36. b	37. b	38. b	39.b
40. a	41. a	42. a							

Q43. While doing thoracocentesis, it is advisable to introduce needle along

a) Upper border of the rib
b) Lower border of the rib
c) In the center of the intercostal space
d) In anterior part of intercostal space

Q44. All of the following arteries are common sites of occlusion by a thrombus except

a) Anterior interventricular
b) Posterior interventricular
c) Circumflex
d) Marginal

Q45. The following statements are true regarding the S A node except -

a) Is located at the right border of the ascending aorta
b) It contains specilized nodal cardiac muscle
c) It is supplied by the atrial branches of the right coronary artery
d) It initiates cardiac conduction

Q46. The coronary sinus -

a) Lies in anterior part of the coronary sulcus
b) Ends in right atrium
c) Has venae cordis minimae as its tributaries
d) Develops from right anterior cardinal vein

Q47. Which of the following structures constitutes part of ventricle of heart-

a) Auricle
b) Crista terminalis
c) Fossa ovalis
d) Trabeculee carenae

Q48. Consider the following statements -

a) Venacaval opening of the diaphragm situated at the level of T_8 transmit -
b) Inferior vena cava
c) Vagus nerve
d) Branches of the right phrenic nerve
e) Thoracic duct

Which of the statements given above are correct ?

a) 1 and 2 b) 2 and 3
c) 1 and 3 d) 1 and 4

Q49. The normal narrowing in the middle of the oesophagus is caused by-

a) Azygos vein
b) Hemiazygos vein
c) Right main bronchus
d) Left main bronchus

Q50. The last tributary of the azygos vein is -

a) Right superior intercostal vein
b) Hemi-azygos vein
c) Right bronchial vein
d) Accessory azygos vein

Q51. Structures that pass from thorax to abdomen behind the diaphragm are all except -

a) Azygos vein
b) Aorta .
c) Thoracic duct
d) Greater splanchnic nerve

Q52. Most common site of Morgagni Hernia is -

a) Left Anterior
b) Right posterior
c) Right Anterior
d) Left posterior

Q53. All of the following characteristics differentiate a typical cervical vertebra from a thoracic vertebra except-

a) Has a triangular vertebral canal
b) Has foramen transversarium
c) Superior articular facet is directed backwards & upwards
d) Has a large vertebral body

Q54. A "Potential Anastomosis" seen in-

a) Labial branch of facial artery
b) Intercostal artery
c) Coronary artery
d) Arterial arcades of mesentery

Q55. Which of the following duct commences in the abdomen as an elongated lymph sac of the cisterna chyli is

a) Thoracic duct
b) Gartner's duct
c) Bile duct
d) Hepatic duct

43. a	44. a	45. a	46. b	47. d	48. c	49. d	50. c	51. d	52. c	53. d
54. c	55. a									

Q56. In a case of chest pain with pericarditis and pericardial effussion, pain is referred by -

a) Phrenic nerve
b) Superficial cardiac plexus
c) Deep cardiac plexus
d) Vagus nerve

Q57. Pleural tapping in the mid- axillary line, muscle not pierced is

a) Internal intercostal
b) External intercostal
c) Inner most intercostal
d) Transversus thoracis

Q58. Which of the following is the most cranial structure in the root of left lung?

a) Bronchus
b) Pulmonary artery
c) Pulmonary vein
d) Bronchial artery

Q59. If circumflex artery gives the posterior interventricular branch, this circulation is described as

a) Right dominance
b) Left dominance
c) Codominance
d) Undetermined

Q60. Direct opening in the right atrium with

a) Anterior cardiac vein
b) Oblique vein
c) Middle cardiac vein
d) Great cardiac vein

Q61. In the lungs bronchial arteries supply the bronchopulmonary tree

a) Till tertiary bronchi
b) Till segmental bronchi
c) Till respiratory bronchioles
d) Till alveolar sacs

Q62. The thoracic duct receives tributaries from all of the following except -

a) Bilateral ascending lumbar trunk
b) Bilateral descending thoracic trunk
c) Left upper intercostal duct
d) Right bronchomediastinal lymphatic trunk

Q63. Fibrous pericardium is attached to -

a) Central tendon b) Right crus
c) Left crus d) Pleura

Q64. Which of the following is true about the starting course azygous vein course -

a) Superior venecava
b) Posteriorly to inferior venecava
c) Anterior lumbar vein
d) None

Q65. True about Latissimus dorsi – (PGI)

a) Nerve supply from long thoracic nerve
b) Inserted into bicipital groove of humerus
c) Used to fill up back defects
d) Blood supply from lateral thoracic artery
e) Origin from upper four ribs

Q66. Boundary of triangle of auscultation is not formed by

a) Serratus anterior
b) Scapula
c) Trapezius
d) Latissimus dorsi

Q67. In a Subclavian artery block at the outer border of 1st rib, all of the following arteries help in maintaining the circulation to upper limb except -

a) Subscapular artery (AIIMS Nov 08)
b) Superior thoracic
c) Thyrocervical trunk
d) Suprascapular artery

Q68. Aortic hiatus contains

a) Left gastric vein and thoracic duct
b) Thoracic duct and hemiazygos vein
c) Azygos vein and thoracic duct
d) Left vagus and thoracic duct

Q69. Blood supply of pectoralis major muscles is /are - (PGI)

a) Thoracoacromial trunk
b) Lateral thoracic artery
c) Internal mammary artery perforating branches
d) Axillary artery
e) Subclavian artery

56. a	57. d	58. b	59. b	60. a	61. c	62. a	63. a	64. b	65. b,c	66. a
67. b	68. c	69. a,b,c								

Q70. Spinal epidural space contains –

a) Areolar tissue and internal vertebral venous plexuses
b) Only areolar tissue
c) Only cerebrospinal fluid
d) Vertebral venous plexus and cerebrospinal fluid

Q71. Spinal epidural space is the largest at the level of the -

a) 12th thoracic vertebra
b) 1st lumbar vertebra.
c) 2nd lumber vertebra
d) 3rd lumber vertebra

Q72. All of the following are true about phrenic nerve, except-

a) It is purely motor nerve
b) It arise briefly from C_4 spinal nerve
c) It is formed at the lateral order of scalenus anterior
d) Accessory phrenic is commonly a branch from the nerve to subclavius

Q73. True about left phrenic nerve

a) Lies anterior to anterior scalenous muscle
b) Posterior to brachial plexus
c) Posterior to subclavian artery
d) Posterior to hilum left lung

Q74. Left sided superior vena cava drains into -

a) Right atrium b) Left atrium
c) Coronary sinus d) Pericardial space

Q75. Hassall's corpuscles are seen in –

a) Thymus b) Thyroid
c) Parathyroid d) Spleen

Q76. Which of the following accompanies the anterior interventricular artery?

a) Great cardiac vein
b) Middle cardiac vein
c) Small cardiac vein
d) Right marginal vein

Q77. At what level does the trachea bifurcates?

a) Upper border of T4
b) Lower border of T4
c) 27.5 cm from the incisors
d) Lower border of T6

Q78. Which of the following represents the surface marking of the aortic valve?

a) Sternal end of left 3rd costal cartilage
b) Sternal end of right 3rd costal cartilage
c) Besides the sternum in left 3rd intercostal space
d) Besides the sternum in right 3rd intercostals space

Q79. Which of the following is supplied by the abdominal aorta?

a) Accessory lung lobes
b) Bronchopulmonary segment
c) Sequestrated lung tissue
d) Base of lung

Q80. All of the following lie between the 1st rib and the apex of the lung, except

a) Thoracic duct
b) Superior intercostal artery
c) First posterior intercostal vein
d) Sympathetic trunk

Q81. Which of the following is not supplied by the right coronary artery?

a) SA node
b) AV node
c) AV bundle
d) Right bundle branch

Q82. Surface marking of the mitral valve is

a) Behind sternal end of left 4th costal cartilage
b) Behind sternal end of right 4th costal cartilage
c) Left 4th intercostal space in the midclavicular line
d) Left 3rd intercostal space in the midclavicular line

Q83. Superior vena cava opens into right atrium at the level of -

a) T1 b) T3
c) T4 d) T5

70. a	71. d	72. a	73.	74. c	75. a	76. a	77. d	78. a	79. c	80. a
81. d	82. a	83. d								

Q84. Opening of esophagus into diaphragm is at the level of -

a) T6 b) T10
c) T12 d) T8

Q85. Distance of the Lower Esophageal Sphincter from the upper incisors is–

a) 15cm b) 22.5cm
c) 27.5cm d) 37.5cm

Q86. Aortic area for auscultation overlying the chest wall is located at –

a) Cardiac apex
b) 2nd intercostal space on right side
c) 2nd intercostal space on left side
d) Epigastric region

Q87. Hyaline cartilage of respiratory tree extends upto-

a) Tertiary bronchiole
b) Secondary bronchiole
c) Terminal bronchiole
d) Bronchi

Q88. Length of adult trachea is-

a) 5-6 cm b) 10-11 cm
c) 15-16cm d) 20-2 lcmv

Q89. Sympathetic supply to heart

a) C_5-C_7 b) T_1-T_4
c) C_1-C_4 d) T_5-T_9

Q90. Esophagus starts at which level-

a) Upper border of cricoid cartilage
b) Lower border of cricoid cartilage
c) Thyroid cartilage
d) Hyoid cartilage

Q91. Surface marking of oblique fissure of lung include all except -

a) T_3
b) 5^{th} rib
c) 7^{th} rib
d) 6^{th} costal cartilage

Q92. Blood supply of liver -

a) 80 % hepatic artery, 20 % portal vein
b) 20 % hepatic artery, 80 % portal vein
c) 50 % hepatic artery, 50 % portal vein
d) 100 % hepatic artery

Q93. Hemiazygous vein crosses left to right at the level of-

a) T8 b) T10
c) T12 d) T6

Q94. Floor of Fossa ovalis is a remnant of-

a) Septum primum
b) Septum secundum
c) Ductus arteriosus
d) ductus venosus

Q95. SA node blood supply is -

a) Rt. coronary
b) Lt. coronary
c) Lt. and descending
d) Ant aortic sinus

Q96. Lower border of lung is upto level of rib at mid- axillary line

a) 6 b) 8
c) 10 d) 12

Q97. Occlusion of left anterior descending artery results in ischemia of -

a) Anterolateral wall
b) Left atrium
c) Right ventricle
d) Interatrial septum

Q98. Ductus venosus connects-

a) Pulmonary trunk and descending aorta
b) Right atrium and left atrum
c) Umbilical vein and IVC
d) Pulmonary trunk and ascending aorta

Q99. Thoracic duct ends at-

a) T1 b) C7
c) T5 d) T8

Q100. Middle lobe of lung contains, segments -

a) Superior & inferior
b) Anterior & posterior
c) Medial & lateral
d) Apical & basal

Q101. Azygos lobe is found in -

a) Heart b) Spleen
c) Lung d) Pancreas

Q102. Blood supply of thoracic part of esophagus

a) Aorta
b) Inferior thyroid artery
c) Gastric artery
d) Superior thyroid artery

84. b	85. d	86. b	87. a	88. b	89. b	90. b	91. c	92. b	93. a	94. a
95. a	96. b	97. a	98. c	99. b	100. c	101. c	102.a			

Q103. Fossa ovalis closes because of fusion of

a) Septum primum + Endocardial cushion
b) Septum secundum + Endocardial cushion
c) Septum primum + Septum secundum
d) None

Q104. The vein in the cardiac anterior interventricular groove is-

a) Great Cardiac Vein
b) Anterior cardiac vein
c) Posterior cardiac vein
d) Thebesian vein

Q105. The blood supply of breast is by all the following arteries except

a) Thoracodorsal artery
b) Thoracoacromial artery
c) Lateral thoracic artery
d) Internal thoracic artery

Q106. Which of the following muscles is enclosed within the clavipectoral fascia? (Corned 09)

a) Pectoralis major
b) Serratus anterior
c) Coracobrachialis
d) Subclavius

Q107. In theright atrium, the limbus fossa ovalis is remnant of -

a) Septum primum
b) Septum secundum
c) Endocardial cushions
d) Tricuspid valve orifice

Q108. All the following vessels end directly in the right atrium EXCEPT-

a) Coronary sinus
b) Oblique vein of left atrium
c) Anterior cardiac vein
d) Venae cordis minimae

Q109. All of the following open into Right atrium except-

a) Anterior cardiac vein
b) Venae cordis minimi
c) Coronary sinus
d) Middle cardiac vein

Q110. Cardiac septum develops by

a) 5-8 weeks b)9-12 weeks
c) 12-16 weeks d)16-18 weeks

Q111. Torus aorticus is ?

a) Bulge in the atria
b) Bulge in aorta
c) Aortic wall tear
d) Septal defect

Q112. Root value of phrenic nerve is?

a) C2, C3, C4 b) C3,C4,C5
c) C4,C5,T1 d) C5,Tl,T2

Q113. Trachea is lined by ?

a) Simple columnar
b) Pseudostratified columnar
c) Simple cuboidal
d) Stratified squamous, non-keratinized

Q114. First stage of lung development is?

a) Pseudoglandular
b) Tubular
c) Alveolar
d) Canalicular

Q115. Third coronary artery is ?

a) Left anterior descending
b) Left anterior descending
c) Conus artery
d) Vieussen's artery

Q116. S.A. Node is located at ?

a) Upper end crista terminalis
b) Lower end of crista terminalis
c) At opening of IVC
d) At ostium primum

Q117. In an embryo, the 4th arch forms?

a) Aortic arch
b) Right subclavian artery
c) Right pulmonary artery
d) Left pulmonary artery
e) Left subclavian artery

103.	104.a	105.a	106.d	107.b	108.b	109.d	110.a	111.a	112.b	113.b
114.a	115.c	116.a	117.a							

Q118. Most posterior structure seen in root of lung is ?

a) Bronchus
b) Superior pulmonary vein
c) Inferior pulmonary vein
d) Pulmonary artery

Q119. Right tracheobronchial angle is? (DNB)

a) 10-15 degree
b) 25-30 degree
c) 40-50 degree
d) 80-90 degree

Q120. Triangle of auscultation is seen in ?

a) 5th intercostal space
b) 6th intercostal space
c) 7th intercostal space
d) 8th intercostal space

Q121. Thoracic sympathetic nerve trunk lies ?

a) In front of body of vertebra
b) In front of head of ribs
c) Anterior to the costal pleura
d Behind the sternum

Q122. The veins of the pericardium drain into-

a) Superior vena cava
b) Inferior vena cava
c) Azygos vein
d) Left brachiocephalic vein

Q123. Select the statement NOT true with respected to transverse thoracic plane-

a) Is the demarcation plane between superior and inferior mediastinum
b) Passes anteriorly from sternal angle to posteriorly T4 disc
c) Is an important anatomical and radiological marking
d) Passes through the cardiac chambers in normal subjects

Q124. Superior thoracic aperture is bounded by following EXCEPT-

a) T1 vertebra
b) 1st pair of ribs and their costal cartilage
c) Superior border of the manubrium
d) Xiphoid process

Q125. Which of the following is related to mediastinal part of right lung

a) Arch of aorta
b) SVC
c) Pulmonary trunk
d) Left ventricle

Q126. Oesophagus is present in which mediastinum

a) Anterior b) Posterior
c) Middle d) None

Q127. Anterior diaphragnatic hernia is through

a) Oesophageal opening
b) Paraesophageal opening
c) Foramen of morgagni
d) None

Q128. Posterior to sternum is

a) Left atrium
b) Left ventricle
c) Right atrium
d) Right ventricle

Q129. False rib is

a) 1^{st} b) 2^{nd}
c) 6^{th} d) 10^{th}

Q130. Which of following is attached to first rib

a) Scalenus posterior
b) Serroatus posterior superior
c) Scalenus medius
d) None of the above

Q131. 8, 9 & 10th ribs are attached to 7th rib by which joint

a) Fibrous
b) Synovial
c) 1^{st} cartilagenous
d) 2^{nd} cartilaginous

118.a	119.b	120.b	121.b	122.a	123.d	124.d	125.b	126.b	127.c	128.d
129.d	130.c	131.b								

Q132. AV node is situated in
a) Opening of SVC
b) Interventricular septum
c) Koch's triangle
d) None

Q133. Which are segments of upper lobe of right lung
a) Anterior, posterior, medial
b) Lateral, medial, superior
c) Apical, anterior, posterior
d. Basal, medial, lateral

Q134. Thoracic duct does not drains –
a) Right upper part of body
b) Left upper part of body
c) Right lower part of body
d) Left lower part of body

Q135. Not true about right bronchus
a) Shorter
b) Wider
c) More horizontal
d) In the line of trachea

Q136. True about cardiac muscle is
a) Spindle shaped
b) Large central nucleus
c) No gap junctions
d) Arranged in sheets

Q137. Right superior intercostal vein drains into
a) Brachiocephalic vein
b) Azygos vein
c) NC
d) None of the above

Q138. Left bronchus is
a) Longer and narrow
b) Shorter and narrow
c) Longer and wider
d) Shorter and wider

Q139. Not true about visceral pleura -
a) Pain insensitive
b) Supplied by phrenic nerves
c) Has three borders
d) Develops from splanchnopleural mesoderm

Q140. Blood supply of ventral 2/3rd of interventricular septum of heart is-
a) Right coronary artery
b) Left coronary artery
c) Posterior interventricular artery
d) Marginal artery

Q141. The costal cartilages of these ribs do not reach the sternum
a) 11^{th} & $12th$ b) 1^{st} & 2^{nd}
c) 6^{th} & $7th$ d) 8^{th}, 9^{th} & 10^{th}

Q142. Structure passing through esophageal opening of diaphragm -
a) Right phrenic nerve
b) Azygous vein
c) Gastric nerves
d) Thoracic duct

Q143. Muscle of expiration
a) External intercostal
b) Diaphragm
c) Internal intercostal
d) Serratus anterior

Q144. All of the following are contents of middle mediastinum except
a) Phrenic nerve
b) Ascending aorta
c) Arch of aorta
d) Pulmonary artery

Q145. Thoracic duct crosses from right side to left side at which vertebral level
a) T_{10} b) T_5
c) L1 d) L_5

132.c	133.c	134.a	135.c	136.b	137.b	138.a	139.b	140.b	141.a	142.c
143.c	144.c	145.b								

Thorax – Explanations

1. c) Posterior interventricular

Posterior interventricular branch is most appropriate answer coz it comes most of the times from right coronary artery

2. b) Posterior and left

Posterior and left is Commonest location of diaphragmatic

3. b) Ulnar nerve

Right Phrenic nerve alongwith IVC passes through vena caval opening

Left Phrenic nerve pierces left dome

4. c) Left superior intercostal vein

Left superior intercostal vein drains into left brachiocephalic and not into Azygos

5. b) Independent pulmonary vein

Pulmonary vein is intersegmental

6. c) Azygos vein

Because it ends by draining in SVC by arching forward at the level of T4

7. c) Superior vena cava

Azygous vein drains into SVC

8. c) Internal thoracic artery

Superior epigastric artery is branch of Internal thoracic artery

Inferior epigastric artery is branch of External Iliac artery

9. c) Right coronary

Mostly it is branch of Right coronary

Sometimes can be a branch of left coronary

10. d) Origin of Left Coronary artery

It does not form the boundary of Koch's triangle which is bounded by:-

a) Tendon of Todaro
b) Septal leaflet of tricuspid valve
c) Orifice of coronary Sinus

11. b) Lower apical

Lower apical & Posterior of Upper lobe are most dependant part of the lung in the SUPINE position. If we have to mark one Lower apical > Posterior of Upper lobe

Posterior Basal is most dependant part of the lung in the ERECT position

12. b) Scalenus posterior

Read the text below

Scalenus posterior inserts on second rib

13. c) Sympathetic trunk

Read the text below

Structures passing through the aortic hiatus of diaphragm are :-

Aorta

T – Thoracic duct

Azygos vein (Mostly)

Sympathetic trunk passes behind medial arcuate ligament

14. d) Left branchiocephalic vein

Read the text below

It drains into Left branchiocephalic vein

15. c) Septum primum + Septum secundum

Read the text below

Fossa ovalis closes because of fussion of Septum primum + Septum secundum

16. c) Subepicardially

SA node is located Subepicardially

17. b. Sensitive to pain

a) Supplied by vagus N - False – intercostal & phrenic nerve
b) Sensitive to pain – True
c) Derived from splanchnopleuric layer of lateral plate mesoderm – false – Somatopleuric layer of lateral plate mesoderm
d) Extends upto T2 – False – upto T12

18. d) Anterior cardiac vein

Anterior cardiac vein drains directly into right atrium.

19. b) Inferior phrenic artery

Inferior phrenic artery doesn't supply Oesophagus

20. a) Behind the left atrium

The oblique sinus of pericardium lies Behind the left atrium

21. a) 10-12 cm

Length of trachea is 10-12 cm

22. a) Pulmonary artery
b) Pulmonary vein
c) Bronchial artery

Pulmonary artery, Pulmonary vein & Bronchial artery supply lungs

23. c) Vagus nerve passes through it
d) Lie in rt. crura of diaphragm

a) Lies between two crura of diaphragm – False
b) At the level of D_{12} vertebra – False – D10 level
c) Vagus nerve passes through it – True
d) Lie in rt. crura of diaphragm- True
e) Thoracic duct passes through it– False- it passes through Aortic opening

24. b) Acute marginal
c) Posterior interventricular
e) Posterior ventricular

25. b) Respiratory bronchiole

Bronchial artery supplies upto Respiratory bronchiole

26. c) Left common carotid artery arising from brachiocephalic trunk

27. d) Rotation

The lumbar region of the vertebral column doesn't permit Rotation

28. b) Posterior interventricular sulcus

The middle cardiac vein is located at the Posterior interventricular sulcus

29. d) Thoracic splanchnic nerve

In angina pectoris, the pain radiating down the left arm is mediated by increased activity in afferent (sensory) fibers contained in the Thoracic splanchnic nerve because this is mediated by sympathetic fibers

30. b) Sympathetic excitatory

Sympathetic excitatory
Parasympathetic inhibitory

31. d) All

The stability of the vertebral column is due to -
Vertebra and vertebral discs, Interspinous ligaments and Paraspinal muscle

32. d) Is narrowest at its begining

The esophagus Is narrowest at its begining

33. d) Left branchiocephalic vein

Superior intercostal vein drains into branchiocephalic vein in both sides

34. d) Superior

The arch of aorta lies in the Superior mediastinum

35. a) Right atrium
b) Left atrium

The base of the heart is formed by the Right atrium & Left atrium mainly left atrium.

36. b) Generates an impulse at the rate of about 70/min and initiates the heart beat

SA node Generates an impulse at the rate of about 70/min and initiates the heart beat

37. b) Vena cardie minimi drains into surface of heart

Vena cardie minimi drains into chambers of heart

38. b) Anterior wall of the left ventricle

Occlusion of the LAD will lead to infarction of Anterior wall of the left ventricle

39. b) Serratus posterior inferior

Serratus posterior inferior depress the ribs.

40. a) Costocervical trunk

Superior intercostal artery is a branch of Costocervical trunk and it gives posterior intercostal artery in first two intercostal spaces.

41. a) Internal mammary artery

Anterior intercostal artery is branch of

Internal mammary artery – 1-6 i/c spaces

Anterior intercostal artery is branch of Musculophrenic artery – 7-9 i/c spaces

42. a) Right recurrent laryngeal nerve

Right recurrent laryngeal nerve winds round Right subclavian artery and hence does not pass through the superior aperture of thorax

43. a) Upper border of the rib

While doing thoracocentesis, it is advisable to introduce needle along Upper border of the rib to avoid injury to Neurovascular structures which lie along lower border of the rib.

44. a) Marginal

Marginal arteries are rarely the sites of coronary vaso-occlusive disease.

There are two main marginal arteries: 1. Acute marginal (branch of right coronary) and 2. Obtuse marginal (branch of circumflex, left coronary artery).

Incidence of MI :LADA > RCA> Left circumflex A.

Posterior interventricular artery is a branch of right coronary artery and incidence of thrombosis is statistically less.

45. a) Is located at the right border of the ascending aorta

S A node is situated in the wall of the right atrium in the upper part of sulcus terminalis just below the opening of superior vena cava.

46. b) Ends in right atrium

a) Lies in anterior part of the coronary sulcus – False – in posterior part
b) Ends in right atrium – True
c) Has venae cordis minimae as its tributaries – False – direct into chambers of heart
d) Develops from right anterior cardinal vein – False – from left horn of sinus venosus

47. d) Trabeculee carenae

Trabeculee carenae are part of ventricle of heart whereas Auricle, Crista terminalis & Fossa ovalis are parts of atrium

48. c) 1 and 3

Inferior vena cava & Branches of the right phrenic nerve pass through IVC opening. Left phrenic pierces the left dome of diaphragm.

49. d) Left main bronchus

Left main bronchus cross to left & is responsible for one of the constriction of Oesophagus at the level of T6.

50. c) Right bronchial vein

The last tributary of the azygos vein is Right bronchial vein

51. d) Greater splanchnic nerve

Greater splanchnic nerve pass from thorax to abdomen by piercing the crira of the diaphragm.

52. c) Right Anterior

Morgagni – Right Anterior

Bochdalek– Left Posterior

53. d) Has a large vertebral body

Cervical vertebral body small & broad from side to side.

54. c) Coronary artery

A "Potential Anastomosis" seen in Coronary artery.

55. a) Thoracic duct

Thoracic duct commences in the abdomen as an elongated lymph sac of the cisterna chyli.

56. a) Phrenic nerve

In a case of chest pain with pericarditis and pericardial effussion, pain is referred by Phrenic nerve

57. d) Transversus thoracis

Transversus thoracis is another name of Sternocostalis which is not pierced in Pleural tapping in the mid- axillary line

58. b) Pulmonary artery

Pulmonary artery on Left side & Eparterial Bronchus on right side are the most cranial structure in the root of lung

59. b) Left Dominance

Dominance is defined by the parent artery

of posterior interventricular branch. Usually it is branch of Right coronary artery so mostly Right dominance is seen but sometimes it may arise from left circumflex artery making the Left Dominance.

60. a) Anterior cardiac vein

Anterior cardiac vein has Direct opening in the right atrium, rest all three open in Right atrium via coronary sinus.

61. c) Till respiratory bronchioles

Bronchial arteries supply the bronchopulmonary tree Till respiratory bronchioles

62. a) Right bronchomediastinal lymphatic trunk

Right bronchomediastinal lymphatic trunk drains to Right lymphatic duct.

63. a) Central tendon

Fibrous pericardium is attached to Central tendon

64. b) Posteriorly to inferior venecava

Usually azygous vein begins from Posteriorly to inferior venecava

65. b) Inserted into bicipital groove of humerus
c) Used to fill up back defects

a) Nerve supply from long thoracic nerve – False – Thoracodorsal nerve
b) Inserted into bicipital groove of humerus – True
c) Used to fill up back defects – True
d) Blood supply from lateral thoracic artery – False
e) Origin from upper four ribs – False

66. a) Serratus anterior

Boundary of triangle of auscultation is formed by-

- Scapula
- Trapezius
- Latissimus dorsi

67. b) Superior thoracic

In a Subclavian artery block at the outer border of 1st rib, Superior thoracic artery has no role in maintaining the circulation to upper limb.

68. c) Azygos vein and thoracic duct

Aortic hiatus contains Aorta, Azygos vein and thoracic duct

69. a) Thoracoacromial trunk
b) Lateral thoracic artery
c) Internal mammary artery perforating branches

Pectoralis major is supplied by one dominant vascular pedicle from the pectoral branch of the thoraco-acromial axis, supplemented by several smaller secondary segmental vessels from the deltoid and clavicular branches of the thoraco-acromial axis, and perforating branches of the internal thoracic arteries and superior and lateral thoracic arteries.

70. a) Areolar tissue and internal vertebral venous plexuses

In humans the epidural space contains lymphatics, spinal nerve roots, loose connective tissue, fatty tissue, small arteries, and a network of internal vertebral venous plexuses

71. d) 3rd lumber vertebra

Spinal epidural space is the largest at the level of the 3rd lumber vertebra

72. a) It is purely motor nerve

It is NOT purely motor nerve. It contains sensory, motor & autonomic fibres.

73.

Both the phrenic nerves pass anterior to the scalenus anterior muscle in the neck

a) The nerves also cross the subclavian artery anteriorly.
b) The nerves lie medial to the trunks of brachial plexus in the neck.
c) Both the phrenic nerves pass anterior to the hila of both the lungs respectively on each side.
d) Vagus nerve passes posterior to the hilum of the lung.

74. c) Coronary sinus

Left sided superior vena cava drains into Coronary sinus

75. a) Thymus

Hassall's corpuscles are seen in Thymus

76. a) Great cardiac vein

Great cardiac vein accompanies the anterior interventricular artery

Middle cardiac vein accompanies the posterior interventricular artery

77. d) Lower border of T6

Trachea bifurcates at Lower border of T6

78. a) Sternal end of left 3rd costal cartilage

Sternal end of left 3rd costal cartilage represents the surface marking of the aortic valve?

79. c) Sequestrated lung tissue

Sequestrated lung tissue is supplied by the Thoracic/ abdominal aorta

80. a) Thoracic duct

81. d) Right bundle branch

Right bundle branch is supplied by Left coronary Artery

82. a) Behind sternal end of left 4th costal cartilage

Surface marking of the mitral valve is Behind sternal end of left 4th costal cartilage

83. d) T5

Superior vena cava opens into right atrium at the level of T5

84. b) T10

Opening of esophagus into diaphragm is at the level of T10

85. d) 37.5cm

Distance of the Lower Esophageal Sphincter from the upper incisors is 37.5cm

86. b) 2nd intercostal space on right side

Aortic area for auscultation overlying the chest wall is located at 2nd intercostal space on right side

87. a) Bronchi

Hyaline cartilage of respiratory tree extends upto Bronchi

88. b) 10-11 cm

Length of adult trachea is 10-11 cm

89. b) T_1-T_4

Sympathetic supply to heart is T_1-T_4

90. b) Lower border of cricoid cartilage

Esophagus starts at Lower border of cricoid cartilage (C6)

91. c) 7th rib

7th rib is not included in Surface marking of oblique fissure of lung

92. b) 20 % hepatic artery, 80 % portal vein

Blood supply of liver 20 % hepatic artery, 80 % portal vein

93. a) T8

Hemiazygous vein crosses left to right at the level of T8

94. a) Septum primum

Floor of Fossa ovalis is a remnant of Septum primum

95. a) Rt. coronary

SA node blood supply is Rt. coronary

96. b) 8

Lower border of lung is upto level of rib at mid- clavicular line -6

Lower border of lung is upto level of rib at mid- axillary line – 8

Lower border of lung is upto level of rib at post scapular line – 10

97. a) Anterolateral wall

Occlusion of left anterior descending artery results in ischemia of Anterolateral wall

98. c) Umbilical vein and IVC

Ductus venosus connects Umbilical vein and IVC

99. b) C7

Thoracic duct ends at C7

100. c) Medial & lateral

Middle lobe of lung contains, segments- Medial & lateral

101. c) Lung

Azygos lobe is found in Lung

102. **a) Aorta**
Blood supply of thoracic part of esophagus Descending thoracic Aorta

103. **Ans:**
Exp:

104. **a) Great Cardiac Vein**
The vein in the cardiac anterior interventricular groove is Great Cardiac Vein
The vein in the cardiac posterior interventricular groove is middle Cardiac Vein

105. **a) Thoracodorsal artery**
Thoracodorsal artery doesnot supply breast

106. **d) Subclavius**
Subclavius & Pectoralis minor muscles are enclosed within the clavipectoral fascia

107. **b) Septum secundum**
The limbus fossa ovalis is remnant of Septum secundum

108. **b) Oblique vein of left atrium**
Oblique vein of left atrium drains in Coronary sinus

109. **d) Middle cardiac vein**
Middle cardiac vein opens in Coronary sinus

110. **a) 5-8 weeks**
Cardiac septum develops by 5-8 weeks (period of organogenesis)

111. **a) Bulge in the atria**
Torus aorticus is Bulge in the atria because of underlying non-coronary sinus of Aorta

112. **b) C3, C4, C5**
Root value of phrenic nerve is C3,C4,C5 (3,4,5 keep Diaphragm alive)

113. **b) Pseudostratified columnar**
Trachea is lined by Pseudostratified ciliate columnar epithelium.

114. **a) Pseudoglandular**
Stages are: Pseudoglandular, Canalicular, Terminal sac period and Alveolar sac period.

115. **c) Conus artery**
Right Conus artery is also known as Third coronary artery because sometimes it may arise from aortic sinus.

116. **a) Upper end crista terminalis**
Situated in the wall of the right atrium in the upper part of sulcus terminalis just below the opening of superior vena cava.

117. **a) Aortic arch& B. Right subclavian artery**
left side – Arch of Aorta ;
Right side – Right subclavian artery

118. **a) Bronchus**
Ant to Post. Strucutres in both lungs are:
V- pulmonary vein
A - Pulmonary artery
B - Bronchus

119. **b) 25-30 degree**
Right tracheobronchial angle is 25-30 degree
Left tracheobronchial angle is 40-50 degree

120. **b) 6th intercostal space**
Triangle of auscultation is seen in 6th intercostal space

121. **b) In front of head of ribs**
Thoracic sympathetic nerve trunk lies In front of head of ribs

122. **a) Superior vena cava**
The veins of the pericardium drain into Superior vena cava

123. **d) Passes through the cardiac chambers in normal subjects**
Transverse thoracic plane Passes above the cardiac chambers in normal subjects because this plane Is the demarcation plane between superior and inferior mediastinum and heart lies in inferior mediastinum

124. **d) Xiphoid process**
Xiphoid process lies in inferior aspect

125. b) SVC
Right side of heart & veins are related to mediastinal part of right lung

126. b) Posterior
Oesophagus is present in Posterior mediastinum.

127. c) Foramen of morgagni
Anterior diaphragnatic hernia is through Foramen of morgagni

128. d) Right ventricle
Posterior to sternum is Right ventricle

129. d) 10th
True ribs – 1st to 7th
False ribs – 8th to 10th
Floating ribs – 11th & 12th

130. c) Scalenus medius
Scalenus medius & anterior are attached to first rib.

131. b) Synovial
8, 9 & 10th ribs are attached to 7th rib by Synovial joint.

132. c) Koch's triangle
AV node is situated in Koch's triangle

133. c) Apical, anterior, posterior
Upper lobe – Apical, anterior, posterior
Middle lobe – Medial & Lateral
Lower lobe – Apical, anterior basal, posterior basal,Medial basal & Lateral basal

134. a) Right upper part of body
Right upper part of body is drained by right lymphatic duct.

135. c) More horizontal
Less horizontal and more In the line of trachea

136. b) Large central nucleus
Cardiac muscle have Large central nucleus

137. b) Azygos vein
Right superior intercostal vein drains into Azygos vein
Left superior intercostal vein drains into left brachiocephalic vein

138. a) Longer and narrow
Left bronchus is Longer and narrow

139. b) Supplied by phrenic nerves
Visceral pleura is Supplied by ANS & NOT by phrenic nerves

140. b) Left coronary artery
Anterior interventricular artery branch of Left coronary artery supply of ventral 2/3rd of interventricular septum of heart.

141. a) 11th & 12th
11th & 12th costal cartilages do not reach the sternum

142. c) Gastric nerves
Gastric nerves i.e. Vagi pass through esophageal opening of diaphragm.

143. c) Internal intercostal
Internal intercostal helps in forced expiration

144. c) Arch of aorta
c) Arch of aorta is content of superior mediastinum

145 b) T_5
Thoracic duct crosses from right side to left side at T_5 vertebral level.

Abdomen – Questions

Q1. Lower part of vagina develops from

a) Urogenital sinus
b) Mesonephric duct
c) Paramesonephric duct
d) Mesenephric tubules

Q2. Lower limit of left crus of diaphragm is at which vertebral level :

a) 8th Thoracic
b) 10th Thoracic
c) 2nd lumbar
d) 3rd lumbar

Q3. Horse shoe kidney lies below the level of :

a) Coeliac trunk
b) Superior mesenteric artery
c) Inferior mesenteric artery
d) Median sacral artery

Q4. Arterial supply of caecum is through :

a) Right colic artery
b) Middle colic artery
c) Ileocolic artery
d) All of the above

Q5. Uterine artery is a branch of :

a) Anterior internal iliac artery
b) Abdominal artery
c) Posterior internal iliac artery
d) Ovarian artery

Q6. Not a constitute of spermatic cord :

a) Ducts deferens
b) Testicular artery
c) Ilio- inguinal nerve
d) Genital branch of genitofemoral

Q7. Structure passing through lesser sciatic notch :

a) Tendon of obturator internus
b) Superior gluteal vessels
c) Superior gluteal nerve
d) Inferior gluteal nerve

Q8 Left ovarian vein drain into :

a) Common iliac vein
b) Left renal vein
c) Inferior vena cava
d) Internal iliac vein

Q9. Constrictions in ureter are seen at all of the following sites except :

a) At the pelvi-ureteric junction
b) At the brim of lesser pelvis
c) At the crossing by external iliac artery
d) Passage through bladder wall

Q10. TRUE for vagina :

a) Lined by columnar epithelium
b) Anterior fornix is deepest
c) Lacks mucus secreting glands
d) Anterior wall is long as compared to posterior

Q11. Which of the following is NOT supplied by Superior mesenteric artery ?

a) Jejunum b) Appendix
c) Ascending colon d) Descending colon

Q12. Fundus of gallbladder at which vertebral level:

a) L1 b) L3
c) S1 d) S3

Q13. NOT a content of rectus sheath :

a) Superior epigastric vessels
b) Rectus abdominis
c) Pyramidalis muscle
d) Transversus Abdominis muscle

Q14. All of the following structures pass through the esophageal hiatus except

a) Posterior vagal trunk
b) Esophageal branches of the left gastric vessels
c) Anterior vagal trunk
d) Thoracic duct

1. a	2. c	3. c	4. c	5. a	6. c	7. a	8. b	9. c	10. c	11. b
12. a	13. d	14. d								

Q15. The normal position of the uterus is:

a) Anteflexed and anteverted
b) Retroflexed and anteverted
c) Anteflexed and retroverted
d) Retroverted and retroflexed

Q16 Epiploic Foramen is bounded by all except

a) IVC
b) Free border of Lesser omentum
c) Free border of Greater omentum
d) Caudate lobe of Liver

Q17. Dorsal pancreatic bud does not form one of the following -

a) Head
b) Neck
c) Body
d) Uncinate process

Q18. Rectus sheath is formed by:

a) External and internal oblique aponeurosis.
b) External, internal oblique and transverse abdominis aponeurosis
c) Internal oblique and transverse abdominis aponeurosis
d) Internal oblique, transverse abdominis aponeurosis and tranversalis fascia

Q19. Which of the following structures is not derived is not derived from mesoderm?

a) Suprarenal medulla
b) Renal cortex
c) Cardiac musculature
d) Skeletal musculature

Q20. True regarding red areas of spleen is/are? (PGI)

a) Has splenic cords and sinusoids
b) Has T-cell rich peri-articular sheaths
c) Has to perform culling of senescent erythrocytes
d) Has B-cell rich lymphoid tissues

Q21. Appendicular artery is a branch of -

a) Ileo colic artery
b) Right colic artery
c) Middle colic artery
d) Posterior cecal artery

Q22. Recurrent appendicular artery is a branch of- (PGI)

a) Ileocolic artery
b) Right colic artery
c) Appendicular artery
d) Posterior cecal artery

Q23. Caudate lobe of liver is situated between- (PGI)

a) Gall bladder and groove for ligamentum teres
b) IVC and ligamentum Venosum
c) Posterior part of left lobe
d) Anterior superior surface of liver

Q24. Fascia of Denonvilliers

a) Membranous layer of fascia of the thigh
b) Perirenal fascia
c) Fascia between the rectal ampulla and the prostate and the seminal vesicles
d) Posterior layer of perirenal fascia

Q25. Most common type of diaphragmatic hernia - (JIPMER 85)

a) Bochdalek's hernia
b) Morgagnl's hernia
c) Hernia throught the dome
d) Hiatus hernia

Q26. In portal hypertension the sites of portosystemic anastomosis includes- (AIIMS 87)

a) Lower end of esophagus
b) Around umbilicus
c) Lower third of rectum and anal canal
d) All of the above

Q27. Glans penis drains into

a) Ext. iliac lymph nodes
b) Deep inguinal lymph nodes
c) Paraaortic lymph nodes
d) Superior inguinal lymph nodes

Q28. Falciform ligament contains -(AI98)

a) Ligamentum teres
b) Ligamentum venosum
c) Bile duct and portal vein
d) Superior epigastric artery

Q29. All are opening in prostatic urethra except

15. a	16. c	17. d	18. b	19. a	20. a,b,c,d	21. a	22. c	23. b	24. c
25. a	26. d	27. b	28. a						

a) Prostatic utricle
b) Ejaculatory duct
c) Bulburethral glands
d) Prostatic ducts

Q30. Deep inguinal ring contain – (MP 98)

a) Suspensory ligament of ovary
b) Mesosalpinx
c) Mesoovarium
d) Round ligament of uterus

Q31. Lymphatic drainage of cervix is – (MP 98)

a) superficial Inguinal lymph nodes
b) Ext. iliac lymph nodes
c) Paraaortic lymph nodes
d) Deep Inguinal lymph nodes

Q32. True regarding anatomy of the penis is/are? (PGI)

a) External pudendal artery supplies body of penis
b) Nerve supply is derived from obturator Nerve
c) Lymphatics drain to the superficial inguinal lymph nodes
d) Deep artery of penis is derived from the internal pudendal artery

Q33. Which among the following comprise arterial supply of ureter? (PGI)

a) Gonadal artery
b) Middle rectal
c) Vesical artery
d) Internal pudendal artery
e) Common iliac artery

Q34. Afferents of cremasteic reflex are present in

a) Ilioinguinal nerve
b) Genitofemoral nerve
c) Iliohypogastric nerve
d) Pudendal nerve

Q35. Which of the following is not a content of the pudendal canal

a) Pudendal nerve
b) Internal pudendal artery
c) Internal pudendal vein
d) Nerve to obturator internus

Q36. True about inferior mesentric artery-

a) Continues as inferior rectal artery
b) Takes part in formation of marginal artery
c) Arises from coeliac trunk
d) Supplies mid gut

Q37. If a missile enters the body just above the pubic ramus through the anterior adominal wall it will most likely pierce which of the following structures

a) Abdominal aorta
b) Left renal vein
c) Urinary bladder
d) Spinal cord

Q38. What is the nerve supply to the skin around the umbilicus-(Kerala 2k)

a) 10^{th} thoracic ventral ramus
b) 11^{th} thoracic ventral ramus
c) Subcostal nerve
d) Iliohypogastric nerve

Q39. Blood supply of the sigmoid colon is from - (PGI)

a) Marginal artery of drummond
b) Sigmoidal artery
c) Superior hemorrhoidal artery
d) Middle colic artery
e) Left colic artery

Q40. Lesser sac of the stomach is bounded by - (PGI)

a) Posterior wall of stomach
b) Visceral surface of spleen
c) Under surface of liver
d) Greater omentum
e) Right crus of diaphragm

Q41. Post Superior iliac spine lies at the level of -

a) L_3 b) L_4
c) S_1 d) S_2

Q42. Number of vascular segments present in kidney are ?

a) 5 b) 7
c) 9 d) 11

29. c	30. d	31. b	32. c,d	33. a,c,e	34. b	35. d
36. b	37.c	38. a	39. a,b,c,e	40. a,b,c,d	41. d	42. a

Q43. All of the following are the posterior relations of the kidney except-

a) Psoas major
b) Quadratus lumborum
c) Sympathetic chain
d) Ilioinguinal nerve

Q44. The following provide maximum support to uterus -

a) Broad ligament
b) Mackenordt's ligament
c) Round ligament
d) Vascicouterine fold

Q45. Perineal muscles include all except -

a) Ischiocavernosus
b) Puborectalis
c) Bulbospongiosus
d) Transverse perineii

Q46. Ventral mesogastrium derivatives include A/E

a) Falciform ligament
b) Coronary ligament
c) Lesser omentum
d) Gastrosplenic ligament

Q47. Branch of posterior division of internal iliac artery is

a) Superior gluteal artery
b) Inferior gluteal artyery
c) Superior vesical artery
d) Middle rectal artery

Q48. The bed of the stomach is not formed by

a) Left kidney
b) Left supra renal gland
c) Splenic vein
d) Tail of pancreas

Q49. Superior mesenteric vein drains into vein- (PGI 97).

a. splenic b) Hepatic
c) Portal d) Inf. vena cava

Q50. Length of male urethra - (NBE based AI 13 Pattern)

a) 3-5 cm b) 5-10 cm
c) 10-15 cm d) 15-20 cm

Q51. Stomach is supplied by

a) Coeliac trunk
b) Splenic artery
c) Gastroduodenal artery
d) All of the above

Q52. Length of Posterior vaginal wall is

a) Variable
b) Same as anterior vaginal wall
c) Less than anterior vaginal wall
d) More than anterior vaginal wall

Q53. Pelvic splanchnic nerve is formed by-

a) Posterior rami of L_s-S_1
b) Posterior rami of S_2 S_3 S_4
c) Anterior rami ofL_5 S, S_2
d) Anterior rami of S2 S_3 S_4

Q54. Normal anteflexion of uterus-

a) 90° b) 100°
c) 125° d) 140°

Q55. Note true about the anal canal is

a) Completely lined by stratified squamous epithelium
b) Supplied by pudendal nerve
c) Drained by veins forming portosystemic anastomosis
d. Part below pectinate line is Painful

Q56. Which is the direct branch of coeliac trunk- (PGI 99)

a) Rt.gastric
b) Lt. gastric
c) Gastroduodenal
d) Rt gastroepiploic artery

Q57. Vein draining to IVC is-(PGI99)

a) Left testicular vein
b) Rt suprarenal vein
c) Lt. ovarian vein
d) Lt. suprarenal vein

Q58. The relation of common bile duct

a) Lies of portal vein
b) Lies right to hepatic artery
c) Lies left to hepatic artery
d) Lies posterior to hepatic artery and portal vein

43. c	44. b	45. b	46. a	47. a	48. c	49. c	50. d	51. d	52. d	53. d
54. c	55. a	56. b	57. b	58. b						

Q59. Cystic artery arises from –

a) Right hepatic artery
b) Left hepatic artery
c) Common hepatic artery
d) Gastroduodenal artery

Q60. The branch of anterior division of internal iliac artery includes – (PGI02)

a) Posterior gluteal
b) Uterine
c) Obturator
d) Internal pudendal
e) Iliolumbar

Q61. Cremasteric muscle is supplied by - (PGI02)

a) Genital branch of genitofemoral nerve
b) Femoral branch of genitofemoral nerve
c) Lateral femoral nerve
d) Ilio-inguinal nerve

Q62. Blood supply of Lt ureter are - (PGI 03)

a) Uterine artery
b) Inferior vesical artery
c) Testicular artery
d) Common iliac artery
e) External femoral artery

Q63. True about inferior vena cava-

a) Passes through diaphragm at level of D_{10} vertebra
b) Rt. suprarenal vein directly drains to it.
c) It lies anterior to the right renal artery.
d) It forms the posterior wall of the epiploic foramen.

Q64. Morrison's pouch is

a) Right subphrenic space
b) Right subhepatic space
c) Left subhepatic space
d) Left subphrenic space

Q65. Lt ureter is related to –(PGI)

a) Quadrtus Lumborum .
b) Lt gonadal vessels
c) Superior mesenteric vein
d) Sigmoid mesocolon
e) Internal iliac artery

Q66. Blood supply of stomach is/are - (PGI)

a) Left gastric artery
b) Short gastric artery
c) Splenic artery proper
d) Renal artery
e) Lt gastroepiploic artery

Q67. Portal vein, hepatic artery and common bile duct are related to which of the following structure?

a) Lesser omentum
b) Greater omentum
c) Splenorenal ligament
d) Gastrosplenic ligament

Q68. Boundaries of foramen of winslow are all except

a) Caudate lobe of liver
b) Inferior vena cava
c) Free border of lesser omentum
d) 4th part of duodenum

Q69. What is the histological appearance of vaginal mucosa

a) Stratified squamous
b) Columnar
c) Simple squamous
d) Cuboidal

Q70. The Blood vessel related to the paraduodenal fossa is

a) Gonadal veins
b) Superior mesenteric artery
c) Portal vein
d) Inferior mesenteric vein

Q71. A posteriorly perforating ulcer in the pyloric antrum of the stomach is most likely to produce initial localized peritonitis or abscess formation in the following

a) Omental bursa (lesser sac)
b) Greater sac
c) Right subphrenic space
d) Hepato renal space (pouch of Morison)

59. a	60. b,c,d	61. a	62. b,c,d	63.a,b,c,d	64. b	65. b,d
66. a,b,e	67. a	68. d	69. a	70. d	71. a	

Q72. While exposing the kidney from behind, all of the following nerves are liable to injury except

a) Lateral cutaneous nerve of thigh
b) Ilioinguinal nerve
c) Subcostal nerve
d) Iliohypogastric nerve

Q73. Which of the following is true about location of Omental Bursa -

a) Left sub hepatic
b) Left sub phrenic
c) Right sub hepatic
d) Right sub phrenic

Q74. Ejaculatory duct opens into

a) Membranous urethra
b) Prostatic urethra
c) Penile urethra
d) Seminal vesicles

Q75. A common structure in Hesselbach's triangle and femoral triangle is

a) Conjoint tendon
b) Inguinal ligament
c) Inferior epigastric artery
d) Rectus femoris

Q76. The efferent limb of the cremaster reflex is provided the

a) Femoral branch of the genitofemoral
b) Genital branch of the genitofemoral nerve
c) Ilioinguinal nerve
d) Pudendal nerve

Q77. All of the following statements about the splenic artery are true except that it

a Has a tortuous course
b) Is a branch of the celiac trunk
c) Has branches that anastomose freely within the spleen
d) Supplies the greater curvature of stomach

Q78. Absence of which amongst the following is the most common variation

a) Right colic artery
b) Middle colic artery
c) Left colic artery
d) Superior rectal artery

Q79. Space of Retzius is found in

a) In front of the bladder
b) Behind the bladder
c) Behind the rectum
d) Behind the cervix

Q80. Ligamentum teres of the liver is remnant of

a) Umbilical arteries
b) Left umbilical vein
c) Ductus-venosus
d) Ductus arteriosus

Q81. Venous blood of liver is drained by -

a) Portal vein
b) Hepatic artery
c) Sinusoids
d) Hepatic veins

Q82. Which of the following is true about splenic artery

a) Smaller than left gastric artery
b) Gives short gastric arteries along the fundus
c) Curves around the fundus
d) Arises from abdominal aorta

Q83. All of the following are branches of splenic artery, EXCEPT

a) Short gastric artery
b) Hilar branches
c) Right gastroepiploic artery
d) Arteria pancreatica magna

Q84. All of the following form visceral relations of spleen except

a) Stomach
b) Splenic flexure of colon
c) Kidney
d) Adrenals

Q85. Vein that doesn't cross the midline is

a) Left brachiocephalic vein
b) Hemiazygous vein
c) Left renal vein
d) Left gonadal vein

72. a	73. a	74. b	75. b	76. b	77. c	78. a	79. a	80. b
81. d	82. b	83. c	84. d	85. d				

Q86. In portal hypertension lower end of the esophagus may show dilatation of veins. Which of the following veins drains into the portal vein from the lower end of the esophagus:

a) Right gastric b) Left gastric
c) Hemiazygos d) Inferior phrenic

Q87. Which of the following arteries is a direct branch of the gastroduodenal artery

a) Right gastric artery
b) Left gastric artery
c) Inferior pancreaticoduodenal artery
d) Right gastroepiploic artery

Q88. True about the anatomy of inguinal hernia which is/ are true

a) Sup. Inguinal ring is an opening in external oblique aponeurosis
b) Indirect hernia lies just medial to inferior epigastric artery
c) Posterior wall is formed by transversalis fascia and conjoined tendon
d) Cremasteric artery is a branch of external iliac artery
e) Indirect hernia lies anteromedial to spermatic cord

Q89. True about ureter

a) Starts at the hilum
b) Changes its direction at the ischial spine
c) Penetrates the bladder wall without any valve
d) Enters the bladder at the lateral angle of the trigone
e) Enters pelvis in front of bifurcation of common iliac artery

Q90. Right isomerism is:

a) Asplenia b) Two spleens
c) One spleen d) Polysplenia

Q91. All of the following statements concerning the ductus deferens are correct except

a) It begins in the head of the epididymis
b) It ascends in the spermatic cord
c) It joints the duct of the seminal vesicle to form the ejaculatory duct
d) It descends medial to the ureter and seminal vesicles

Q92. The artery of the ductus deferens arises from which of the following structures

a) Aorta b) Inferior epigastric
c) Inferior vesical d) Pudendal

Q93. All of the following statements about the splenic artery are true except that it

a) Has a tortuous course
b) Is a branch of the coeliac trunk
c) Has branches that anastomose freely within the spleen
d) Supplies the greater curvature of stomach

Q94. The narrowest part of the ureter is at the

a) Uretero-pelvic junction
b) Hiac vessel crossing
c) Pelvic ureter
d) Uretero - vesical junction

Q95. Benign Prostatic hypertrophy results in obstruction of the urinary tract. The specific condition is associated with enlargement of the

a) Entire prostate gland
b) Lateral lobes
c) Median lobe
d) Posterior lobes

Q96. The Prostatic urethra is characterized by all of the following features, except that it

a) Is the widest and most dilatable part
b) Presents a concavity posteriorly
c) Lies closer to anterior surface of prostate
d) Receives Prostatic ductules along its posterior wall

Q97. Sphincter urethrae is present in

a) Prostatic urethra
b) Spongy urethra
c) Membranous urethra
d) Penile urethra

86. b	87. d	88.	89.	90. a	91.	92. c	93.	94.	95. c
96. b	97. c								

Q98. The following group of lymph nodes receives lymphatics from the uterus except

a) External iliac
b) Internal iliac
c) Superficial inguinal
d) Deep inguinal

Q99. Pelvic fascia between rectum and sacrum is:

a) Denonvillier's fascia
b) Colle's fascia
c) Waldeyer's fascia
d) Scarpa's fascia

Q100. The neck of pancreas is related on its posterior surface to

a) Gastroduodenal artery
b) Superior mesenteric vein
c) Inferior vena cava
d) Bile duct

Q101. Lymphatic drainage of the cervix occurs by all of the following lymph nodes, except

a) Parameterial lymph nodes
b) Deep inguinal lymph nodes
c) Obturator lymph nodes
d) Ext. iliac lymph nodes

Q102. All of the following are the components of the white pulp of spleen, except

a) Periarteriolar lymphoid sheath
b) B cells
c) Antigen presenting cells
d) Vascular sinus

Q103. Subcapsular sinuses are seen in

a) Spleen b) Thymus
c) Thyroid d) Lymph node

Q104. Superficial perineal muscles include

a) Iliococcygeus
b) Ischiococcygeus
c) Bulbospongiosus
d) Levator ani
e) Pubococcygeus

Q105. The mesentery of small intestine, along its attachment to the posterior abdominal wall, crosses all or the following structures

a) Left gonadal vessels
b) Third part of duodenum
c) Aorta
d) Right ureter

Q106. Pyramidalis is supplied by

a) Subcostal nerve
b) Ilioinguinal nerve
c) Iliohypogastric nerve
d) Genitofemoral nerve

Q107. Right kidneys anterior relation : all are devoid of peritoneum, except

a) Duodenum b) Supra renal gland
c) Colon d) Liver

Q108. Contents of mesorectum are of EXCEPT

a) Inferior rectal vein
b) Superior rectal vein
c) Para rectal node
d) Inferior mesenteric plexus

Q109. The segmental division of liver into eight segments is based on

a) Hepatic veins alone
b) Portal vein alone
c) Hepatic veins and common hepatic artery
d) Hepatic veins and portal vein

Q110. Stomach derives its blood supply from all these arteries directly or indirectly except

a) Splenic artery
b) Hepatic artery
c) Superior mesenteric artery
d) Celiac axis

Q111. All of the following statements regarding vas deference are true EXCEPT

a) The terminal part is dilated to form ampulla
b) It crosses ureter in the region of ischial spine
c) It passes lateral to inferior epigastric artery at deep inguinal ring
d) It is separated from the base of bladder by the peritoneum

98. d	99. c	100.b	101.b	102.d	103.d	104.c	105.a	106.a	107.d	108.a
109.d	110.c	111.d								

Q112. Injury to the male urethra below the perineal membrane causes urine to accumulate in

a) Superficial perineal pouch
b) Deep perineal pouch
c) Space of retzius
d) Pouch of douglas

Q113. All are true the trigone of the urinary bladder except

a) Mucosa is loosely associated to the underlying musculature
b) Mucosa is smooth
c) It is lined by transitional epithelium
d) It is derived from the absorbed part of the mesonephric duct

Q114. Supports of the uterus are all except

a) Uterosacral ligament
b) Broad Ligament
c) Mackenrodts' ligament
d) Levator ani

Q115. Renal angle lies between

a) 12^{th} rib & lateral border of sacrospinalis
b) 11^{th} rib & lateral border of sacrospinalis
c) 12^{th} rib & lateral border of quadratus lumborum
d) 11^{th} rib & lateral border of quadratus lumborum

Q116. Pudendal nerve supplying motor part to external sphincter is derived from

a) L_5-S1 roots
b) S1-S_2 roots
c) L_2-L_3 roots
d) S_2-S_4 roots

Q117. Watershed area between SMA and IMA which commonly result in ischemia is

a) Hepatic flexure
b) Splenic flexure
c) Rectosigmoid Jn.
d) Ileocolic Jn.

Q118. Left renal vein crosses the Aorta

a) Anteriorly, above the superior mesenteric artery
b) Anteriorly, below the superior mesenteric artery
c) Posteriorly, at the level of superior mesenteric artery
d) Anteriorly, below the inferior mesenteric artery.

Q119. Shortest part of the colon is

a) Ascending colon
b) Transverse colon
c) Descending colon
d) Sigmoid colon

Q120. Ureteric constriction in the following sites EXCEPT

a) Ischial spine
b) Pelvi-ureteric junction
c) Uretero-vesical junction
d) Crosses the internal iliac artery

Q121. Which of the following is the correct order of pathway for a sperm

a) Straight tubules —> Rete testis —> Efferent tubules
b) Rete tubules —> Efferent tubules Straight tubules
c) Efferent —> tubule Rete testis —» Straight tubules
d) Straight tubule Efferent tubules —»Rete tubules

Q122. Helicine artery are branch of

a) Deep artery of penis
b) Femoral artery
c) External pudendal artery
d) None of the above

Q123. True about valves in portal venous system

a) Present at the junction of superior mesentric artery with the splenic artery
b) Within the portal vein only
c) The whole system is valveless
d) In the intrahepatic portion of portal vein.

112.a	113.a	114.b	115.a	116.d	117.	118.b	119.a	120.a	121.a
122.a	123.c								

Q124. All are the contents of deep perineal pouch except
a) Bulbourethral glands
b) Internal urethral sphincter
c) Dorsal nerve of penis
d) Bulb of penis

Q125. Watershed area between SMA and IMA which commonly result in ischemia is
a) Hepatic flexure
b) Splenic flexure
c) Rectosigmoid junction
d) Ileocolic junction

Q126. Cremasteric artery is a branch of:
a) Internal pudendal artery
b) External pudendal artery
c) Inferior epigastric artery
d) Superior epigastric artery

Q127. Deep perineal pouch contains
a) Bulb of penis
b) Crura of penis
c) Bulbospongiosus
d) Membranous urethra

Q128. The lymphatic drainage of testes is-
a) Inguinal L.N.
b) Mesenteric L.N.
c) Para-aortic L.N.
d) Obturator L.N.

Q129. In rectus sheath which branch of aorta make anastomosis with superior epigastric artery
a) Subclavian artery
b) External iliac artery
c) Internal iliac artery
d) External carotid A
e) Axillary artery

Q130. Which of following is not a permanent mucosal fold?
a) Spiral valve of Heister
b) Gastric rugae
c) Plica semilunaris
d) Transverse rectal fold

Q131. Spleen projects into the following space of peritoneal cavity?
a) Paracolic gutter
b) Infracolic compartment
c) Left subhepatic space
d) Greater Sac

Q132. Which of the following is the terminal group of lymph node for colon?
a) Paracolic b) Epicolic
c) Preaortic d) Ileocolic

Q133. All of the following are branches of splenic artery, Except
a) Short gastric artery
b) Hilar branches
c) Right gastroepiploic artery
d) Arteria pancreatica magna

Q134. A 50-year-old man suffering from carcinoma of prostate showed areas of sclerosis and collapse of T10 and T11 vertebrae in X-ray. The spread of this cancer to the above vertebrae was must probably through
a) Sacral canal
b) Lymphatic vessels
c) Internal vertebral plexus of veins
d) Superior rectal veins

Q135. Urogenital diaphragm is made up of the following, Except
a) Deep transverse Perineus
b) Perinial membrane
c) Colle's fascia
d) Sphincter urethrae

Q136. Nerve or grassi branch of
a) Right vagus b) Left vagus
c) Trigeminal d) Hypoglossal

Q137. All are true about esophagus EXCEPT
a) Lined by stratified squamous epithelium
b) Mucosa is thick
c) Middle third contains both skeletal and smooth muscles
d) Lower third contains only skeletal muscle

Q138. Chief cells of stomach are most abundant in
a) Fundus b) Body
c) Antrum d) Pylorus

124.d	125.b	126.c	127.d	128.c	129.b	130.b	131.d	132.c	133.c	134.c
135. c	136.a	137.d							

Q139. Cell which does not migrate from the base of the crypt to ends of villi is

a) Enterocyte b) Endocrine cell
c) Paneth cell d) Goblet cell

Q140. Right gastroepiploic artery is a branch of

a) Right Hepatic artery
b) Gastroduodenal artery
c) Hepatic artery
d) Superior mesenteric atery

Q141. Which is not supplied by pelvic splanchnic nerves?

a) Rectum
b) Urinary bladder
c) Appendix
d) Uterus

Q142. Sacrotuberous and sacrospinous ligaments attach sacrum to ?

a) Ilium
b) Ischium
c) Pubis
d) Lumbar vertebrae

Q143. Vaginal sphincter is formed by all except

a) Internal urethral sphincter
b) External urethral sphincter
c) Pubovaginalis
d) Bulbospongiosus

Q144. Which one of the following is a content of calots triangle ?

a) Cystic duct
b) Cystic artery
c) Common hepatic artery
d) Common hepatic duct

Q145. Structure contained within rectus sheath are all except

a) Internal thoracic artery
b) Superior epigastric artery
c) Inferior epigastric artery
d) Rectus abdominis

Q146. On contrast radiography which among the following is false?

a) Ileum is featureless
b) Colon has haustrations
c) Jejunum is feathery
d) Distal part of duodenum has a cap

Q147. Minor duodenal papilla is opening of:

a) Hepatic duct (NEET Dec 12 pattern)
b) Hepatopancreatic ampulla
c) Accessory pancreatic duct
d) Bile duct

Q148. Valvulae conniventes are seen in - (PGI)

a) Jejunum
b) Ileum
c) Stomach
d) Colon

Q149. True about ureter's entry into bladder-(PGI)

a) At medial angle of trigone
b) At lateral angle of trigone
c) Make an angle
d) Is straight
e) Valveless

Q150. The following structures are felt on per rectal examination except

a) Bulb of penis
b) Ureter
c) Anorectal ring
d) Urogenital diaphragm

Q151. Which of the following is the terminal group of lymph node for colon?

a) Paracolic
b) Epicolic
c) Preaortic
d) Ileocoic

Q152. Structure not forming watershed area:

a) Splenic flexure (CET Nov 15 Pattern)
b) Brain
c) Duodenum
d) None

138. a	139. c	140. b	141. c	142. b	143. a	144. b	145. a
146. d	147. c	148. a,b	149.b,c,e	150. b	151. c	152. c	

Q153. The commonest anatomical position of appendix is

a) Retrocaecal b) Pelvic
c) Paracaecal d) Preileal

Q154. Coeliac plexus is located

a) Anterolateral & around the arota
b) Posterolateral & around the aorta
c) Anteromedial to lumbar sympathetic chain
d) Posterolateral to lumbar sympathetic chain

Q155. Appendices epiploicae present in - (AIIMSMay 10)

a) Appendix b) Caecum
c) Rectum d) Sigmoid colon

Q156. Neurovascular plane in anterior abdominal wall is - (NBE based NEET 2012-13)

a) Between ext oblique and internal oblique
b) Between int. oblique and transverses abdominis
c) Below transversus abdominis
d) Above ext. oblique

Q157. A hemangioma was found on the left of the falciform ligament of the liver. Surgeon dissecting Couinaud's segments of liver to the left of attachment of falciform ligament resects which lobes: (AIPG 2008)

a) 2,3 b) 1,4b
c) 2,4a d) 1,4a

Q158. Hypogastric sheath is a condensation of- (AI 10)

a) Scarpa's fascia
b) Colle's fascia
c) Pelvic fascia
d) Inferior layer of Urigenital diaphragm

Q159. Lymphatics from the spongy urethra drain into the following lymph nodes - (AI 10)

a) Superior inguinal nodes
b) Internal inguinal nodes
c) Deep inguinal nodes
d) Sacral nodes

Q160. Which of the positions best describes the location of celiac plexus- (A110)

a) Anterolateral to Aorta
b) Posterolateral to Aorta
c) Anterolateral to sympathetic chain
d) Anteromedial to sympathetic chain

Q161. Portocaval (portosystemic) anastomosis is seen at all except- (NBE based NEET 2012-13)

a) Esophagus b) Liver
c) Rectum d) Duodenum

Q162. In portal hypertension, the sites of portosystemic anastomosis includes- (DPG10)

a) Lower end of esophagus
b) Around umbilicus
c) Lower third of rectum and anal canal
d) All of the above

Q163. The rectus sheath contains all of the following except-

a) Pyramidalis muscle (DPG 10)
b) Genitofemoral nerve
c) Inferior epigastric vessels
d) Superior epigastric vessels

Q164. Pouch of Douglas is situated between- (DPG 10)

a) Badder and the uterus :
b) Bladder and pubic symphysis
c) Bladder and the rectum –
d) Uterus and rectum

Q165. Which structure(s) passes behind the inguinal ligament– (PGIMay 10)

a) Femoral branch of genitofemoral nerve
b) Superficial epigastric artery
c) Psoas major
d) Femoral vein
e) Saphenous vein

153. a	154. c	155. d	156. b	157. a	158. c	159.
160. a	161. d	162. d	163. b	164. d	165. a,c,d	

Abdomen – Explanations

1. a) Urogenital sinus

Vagina develops from two parts

Upper part from Paramesonephric duct

Lower part from Urogenital sinus

2. c) 2nd Lumbar

Lower limit of left and right crus of diaphragm is different

L2 for left and L3 for right

3. c) Inferior mesenteric artery

It lies at the level of Inferior mesenteric artery because its ascent is blocked by this artery only

4. c) Ileocolic artery

Ileocolic artery supplies terminal part of ileum, part of Ascending colon,Caecum and appendix

5. a) Anterior internal iliac artery

It is a branch of Anterior division of internal iliac artery

6. c) Ilio- inguinal nerve

It is content of inguinal canal (partial content) but NOT a part of spermatic cord.

It enters through posterior part of canal and exits through superficial inguinal ring

7. a) Tendon of obturator internus

- Tendon of obturator internus passes through lesser sciatic notch
- rest all options pass through Greater sciatic notch
- Other structure which pass through lesser sciatic notch :-
  - Pudendal nerve
  - Internal Pudendal vessels
  - Nerve to obturator internus

8. b) Left renal vein

Left ovarian vein drains into Left renal vein

right ovarian vein drains to IVC

9. c) At the crossing by external iliac artery

Rest three are recognised anatomical constriction

10. c) Lacks mucus secreting glands

There are no glands in the vaginal mucous membrane,

it is kept moist or lubricated by mucous derived from the glands of cervix

11. b) Appendix

It belongs to hind gut and is supplied by inferior mesenteric artery

12. a) L1

L1 i.e., Transpyloric plane, it passes though – Pylorus of stomach, Fundus of gallbladder, Hila of both kidneys, origin of superior mesenteric artery & terminal part of spinal cord

13. d) Transversus Abdominis muscle

Ref: Read the text below

Sol It is not the content

14. d) Thoracic duct

It passes through aortic opening

Structure which pass through the esophageal hiatus:-

- Anterior vagal trunk
- Posterior vagal trunk
- Esophageal branches of the left gastric vessels

15. a) Anteflexed and anteverted

Anteflexed and anteverted is normal Position.

16. c) Free border of Greater omentum

Free border of Greater omentum does not form any boundary for Epiploic Foramen

Epiploic Foramen boundaries:-

- Roof - Caudate lobe of Liver

- Floor – First part of Duodenum
- Anterior - Free border of Lesser omentum
- Posterior – IVC

17. d) Uncinate process

Ref: Read the text below

The dorsal bud forms the upper part of head, neck & body of pancreas.

The ventral bud forms the lower part of head & uncinate process.

18. b) External, internal oblique and tranverse abdominis aponeurosis

Rectus sheath is formed by External, internal oblique and tranverse abdominis aponeurosis

19. a) Suprarenal medulla

Suprarenal medulla develops from neural crest cells.

20. a, b, c & d

21. a) Ileo colic artery

Appendicular artery is a branch of Ileo colic artery

22. c) Appendicular artery

Recurrent appendicular artery is a branch of Appendicular artery which anastomoses at the base of the appendix with a branch of the posterior caecal artery

23. b) IVC and ligamentum Venosum

Caudate lobe of liver is situated between IVC and ligamentum Venosum

24. c) Fascia between the rectal ampulla and the prostate and the seminal vesicles

Fascia of Denonvilliers is Fascia between the rectal ampulla and the prostate and the seminal vesicles

25. a) Bochdalek's hernia

Most common type of diaphragmatic hernia Bochdalek's hernia

26. d) All of the above

27. b) Deep inguinal lymph nodes

Glans penis drains into Deep inguinal lymph nodes

28. a) Ligamentum teres

Falciform ligament contains

Ligamentum teres which is remnant of left umbilical vein.

29. c) Bulburethral glands

Prostatic utricle, Ejaculatory duct and Prostatic ducts have opening in prostatic urethra.

30. d) Round ligament of uterus

Deep inguinal ring contain Round ligament of uterus, which passes through Depp inguinal ring & traverses inguinal canal and comes out of superficial inguinal ring.

31. b) Ext. iliac lymph nodes

Lymphatic drainage of part of cervix is Ext. iliac lymph nodes

32. C & D

- The superficial external pudendal arteries supply the skin and fascia of the penis.
- The main sensory nerve of the penis is the dorsal nerve of the penis. On the glans and bulb of the penis some cutaneous filaments innervate lamellated corpuscles. Afferent fibres from the glans penis and perigenital skin pass via the pudendal nerve to the spinal cord.
- The penile and perineal skin is drained by lymph vessels that accompany the external pudendal blood vessels to the superficial inguinal nodes. Lymph vessels from the glans pass to the deep inguinal and external iliac nodes. Lymph vessels from the erectile tissue and penile urethra pass to the internal iliac lymph nodes.
- Cavernosal artery (deep artery of the penis) is a terminal branch of the internal pudendal artery

33. a, c & e

The ureter is supplied by branches from the renal, gonadal, common iliac, internal iliac, vesical and uterine arteries, and the abdominal aorta

34. b) Genitofemoral nerve

Cremasteic reflex is mediated by Genitofemoral nerve (L1L2) although Afferent maybe mediated by ilioinguinal nerve.

35. d) Nerve to obturator internus

Nerve to obturator internus is not a content of the pudendal canal

36. b) Takes part in formation of marginal artery

Continues as superior rectal artery, Takes part in formation of marginal artery, arises from aorta & supplies hindgut

37. c) Urinary bladder

Urinary bladder is present at described position and among given options it is most appropriate answer.

38. a) 10^{th} thoracic ventral ramus

Nerve supply to the skin around the umbilicus - 10^{th} thoracic ventral ramus

39. a, b, c & e

Sigmoid colon is supplied by Marginal artery of Drummond, Sigmoidal artery, Superior hemorrhoidal artery and Left colic artery

40. a) Posterior wall of stomach
b) Visceral surface of spleen
c) Under surface of liver
d) Greater omentum

Right crus of diaphragm is not a boundary of lesser sac, rest all are the boundaries.

41. d) S_2

Post.Superior iliac spine lies at the level of S_2

42. a) 5

Number of vascular segments present in kideny are 5 (4 anterior & 1 Posterior)

43. c) Sympathetic chain

Sympathetic chain is not among the posterior relations of the kidney

44. b) Mackenordt's ligament

Mackenordt's ligament provide maximum support to uterus, hence it is known as cardinal ligament.

45. b) Puborectalis

Puborectalis is a muscle of pelvis.

46. a) Gastrosplenic ligament

Gastrosplenic ligament is a Dorsal mesogastrium derivative.

47. a) Superior gluteal artery

Superior gluteal artery is a Branch of posterior division of internal iliac artery

Rest all options are branches of anterior division of internal iliac artery.

48. c) Splenic vein

Splenic vein lies behind Pancreas & does not make bed of Stomach

49. c) Portal

Superior mesenteric vein with splenic vein forms Portal vein.

50 d) 15-20 cm

Length of male urethra 15-20 cm

51. d) All of the above

Stomach is supplied by All of the given options.

52. d) More than anterior vaginal wall

Length of Posterior vaginal wall is More than anterior vaginal wall

53. d) Anterior rami of S2 S_3 S_4

Pelvic splanchnic nerve is formed by Anterior rami of S2 S_3 S_4

54. c) 125°

Normal anteflexion of uterus - 125°

Normal anteversion of uterus -90°

55. a) Completely lined by stratified squamous epithelium

Part below pectinate line Completely lined by stratified squamous epithelium, Part above pectinate line is lined by Columnar epithelium

56 b) Lt. gastric

Lt. gastric is the direct branch of coeliac trunk

57. b) Rt suprarenal vein

Rt suprarenal vein drains to IVC whereas Left suprarenal & left gonadal (ovarian/ testicular) drains to left renal vein.

58. b) Lies right to hepatic artery

Common bile duct Lies right to hepatic artery

59. a) Right hepatic artery

Cystic artery arises from Right hepatic artery

60. B, C, D

Uterine, Obturator and Internal pudendal are the branches of anterior division of internal iliac artery.

61. a) Genital branch of genitofemoral nerve

Cremasteric muscle is supplied by Genital branch of genitofemoral nerve

62. B, C, D

Blood supply of ureter are: Renal A., direct branch from aorta, Gonadal A., Common iliac, internal iliac A., Sup & Inf Vesical A.

63. A, B,C, D

All the given statements about IVC are correct.

64. b) Right subhepatic space

Hepatorenal pouch of Morrison is the right subhepatic space, lying between the liver anteriorly and right kidney posteriorly.

65. B, D

Lt gonadal vessels & Sigmoid mesocolon are in anterior relation of left ureter

66. A, B & E

Stomach is supplied by left & right gastric, left & right gastroepiploic , short gastric & post Gastric arteries.

67. a) Lesser omentum

Portal vein, hepatic artery and common bile duct are present in Lesser omentum

68. d) 4th part of duodenum

Boundaries of foramen of winslow includes 2nd part of duodenum
not 4th part of duodenum

69. a) Stratified squamous

Vagina is lined by Stratified squamous mucosa.

70 d) Inferior mesenteric vein

The Blood vessel related to the paraduodenal fossa is Inferior mesenteric vein

Also remember:

Mesenteroparietal recess: It is found only in 1% individuals. It lies below the duodenum behind the upper part of the mesentery. The superior mesenteric vessels lie in the anterior wall of its opening.

71. a) Omental bursa (lesser sac)

A posteriorly perforating ulcer in the pyloric antrum of the stomach is most likely to produce initial localized peritonitis or abscess formation in the Omental bursa (lesser sac), because it lies behind the stomach.

72. a) Lateral cutaneous nerve of thigh

Rest three nerves lie in posterior relations of kidney hence While exposing the kidney from behind, all of these nerves are liable to injury

73. a) Left sub hepatic

Location of Omental Bursa is Left sub hepatic

74. b) Prostatic urethra

Ejaculatory duct opens into Prostatic urethra

75. b) Inguinal ligament

Inguinal ligament is a boundary of both the triangles.

76. b) Genital branch of the genitofemoral nerve

The efferent limb of the cremaster reflex is provided by the Genital branch of the genitofemoral nerve

77. c) Has branches that anastomose freely within the spleen

Splenic artery is the largest branch of celiac trunk, with a tortous course to allow for movement of spleen. It supply body and tail of pancreas via pancreatic branches; stomach via short gastric and left gastroepiploic branches and spleen via non anastomosing straight vessels called penicilli ellipsoids and arterial capillaries.

78. a) Right colic artery

Right colic artery is a small vessel that is highly variable and may be absent.

79. a) In front of the bladder

Space of Retzius is found in In front of the bladder behind pubic symphysis.

80. b) Left umbilical vein

Remnants :

a) Umbilical arteries – Sup. Vesical artery from proximal part and medial umbilical ligament from distal part
b) Left umbilical vein – Ligamentum teres of the liver
c) Ductus-venosus – Ligamentum venosum
d) Ductus arteriosus – Ligamentum arteriosum

81. d) Hepatic veins

Portal vein, Hepatic artery and Sinusoids all supply liver and venous drainage is by Hepatic veins

82. b) Gives short gastric arteries along the fundus

Splenic artery gives many short gastric arteries. It is the largest branch of coeliac trunk.

83. c) Right gastroepiploic artery

Right gastroepiploic artery is a branch of Gastroduodenal artery.

84. d) Adrenals

Adrenals don't form form visceral relations of spleen visceral relations of spleen are :

a) Stomach
b) Splenic flexure of colon
c) Kidney
d) Tail of Pancreas

85. d) Left gonadal vein

Left gonadal vein drains into Left Renal vein so it does not cross midline.

86. b) Left gastric

At lower end of esophagus,porto-caval anastomosis in between:

Tributary of portal vein – Left gastric

Systemic vein – esophageal veins

87. d) Right gastroepiploic artery is a direct branch of the gastroduodenal artery

88. Ans

89. Ans

90. a) Asplenia

Rights sided bilateralism (isomerism) is characterized by asplenia (or hypoplastic spleen) and lefts sided bilateralism (isomerism) is characterized by polysplenia.

91. Ans

92. c) Inferior vesical

The artery of the ductus deferens arises from superior/Inferior vesical

93. Ans

94. Ans

95. c) Median lobe

Median lobe – Benign Prostatic hypertrophy

Posterior lobes – Carcinoma

96. b) Presents a concavity posteriorly

- Prostatic urethra presents an anterior (and not posterior) concavity, which becomes more prominent in the membranous part. It runs downwards and forwards to exit prostate slightly anterior to its apex.
- Though the lumen of the prostatic urethra does show a posterior concavity, as observed in a cut section of prostate.
- Prostatic urethra is considered as the widest and most dilatable part, though recent literature mentions that bulbous part of spongy urethra has the widest lumen.
- Prostatic urethra passes more anteriorly through the prostate and is at the junction of anterior 1/3 and posterior 2/3 rd of prostate. Hence, it lies closer to the anterior surface of the prostate.
- It receives multiple openings of prostatic ductules at its posterior wall.

97. c) Membranous urethra

- External urethral sphincter (sphincter urethrae) is present in relation to the membranous urethra, in the deep perineal pouch.

98. d) Deep inguinal

Deep inguinal nodes don't receive lymphatics from the uterus

99. c) Waldeyer's fascia

- Waldeyer's fascia (presacral fascia) lines the anterior aspect of the sacrum, enclosing the sacral vessels and nerves.
- It is limited postero-inferiorly, as it fuses with the mesorectal fascia, lying above the levator ani muscle.
- Denonvillier's fascia is a membranous partition separating the rectum from the prostate and urinary bladder; this structure in the male corresponds to the fascia rectovaginalis in the female.

Colles fascia lines the superficial perineal pouch.

Scarpa's Fascia is a fascia of Anterior abdominal wall.

100. b) Superior mesenteric vein

Superior mesenteric vein fuses with splenic vein & forms portal vein behind The neck of pancreas.

101. b) Deep inguinal lymph nodes

Deep inguinal nodes don't receive lymphatics from the uterus

102. d) Vascular sinus

- Vascular sinus is present in red pulp in spleen.
- Spleen is composed of red pulp having large number of red blood cells (and comparatively very few white blood cells). It consists of venous sinusoids and splenic cords of Billroth.
- White pulp of spleen has large number of white blood cells arranged in diffuse and nodular lymphoid tissue for immune function.it has lymphoid follicles with B lymphocytes at the germinal centres, whereas T cell lie in the periphery. The eccentric arterioles in lymphoid follicles are surrounded by peripheral T lymphocytes forming PALS – Peri Arteriolar Lymphatic Sheath.

103. d) Lymph node

- Lymph node is identified by presence of subcapsular sinus, containing lymph.

104. c) Bulbospongiosus

Bulbospongiosus is one of the Superficial perineal muscles, rest all are pelvic muscles.

105. a) Left gonadal vessels

a) The root of mesentery lies on the right side of abdominal cavity and crosses right gonadal vessels (not left).
b) The root of the mesentery lies along a line running diagonally from the duodenojejunal flexure on the left side of the second lumbar vertebral body to the right sacroiliac joint.
c) It crosses over the third (horizontal) part of the duodenum, aorta, inferior vena cava, right ureter and right psoas major.
d) It does not cross the left ureter, left gonadal vessels or superior mesenteric artery.
e) Superior mesenteric artery is a content of the mesentery.

106. a) Subcostal nerve

Pyramidalis is supplied by Subcostal nerve

107 d) Liver

Liver is peritoneal structure wheras Duodenum, Supra renal gland and transverse Colon are devoid of peritoneum.

108. a) Inferior rectal vein

- Inferior rectal vein is not a content of mesorectal fascia.
- The mesorectum (mesentery of the rectum) and its contents are intimately related to the rectum to the level of levator ani.
- Mesorectum contains superior rectal artery and its branches, superior rectal vein and its tributaries, lymphatic vessels and nodes that

lie along the superior rectal artery. It also contains branches from the inferior mesenteric plexus which descend to innervate the rectum and loose adipose connective tissue.

109. d) Hepatic veins and portal vein

The segmental division of liver into eight segments is based on Hepatic veins and portal vein

110. c) Superior mesenteric artery

Superior mesenteric artery is artery of midgut and stomach being foregut structure is not supplied by it.

111. d) It is separated from the base of bladder by the peritoneum

- Vas deferens lies on the posterior wall (base) of the bladder and there is no peritoneum between them. So, it is not separated from the base of bladder by the peritoneum.
- Peritoneum actually lies more posterior to the vas deferens and forms the recto-vesical pouch.
- Below the pouch lies the fascia of Denonvillier's–a pelvic fascia condensation to support the pelvic viscera.
- Vas deferens hooks around the inferior epigastric artery (laterally) at deep inguinal ring and crosses to the ureter (superiorly) in the region of ischial spines. It shows a terminal dilatation called as ampulla, before it joins the duct of seminal vesicle to form common ejaculatory duct.

112. a) Superficial perineal pouch

Injury to the male urethra below the perineal membrane causes urine to accumulate in Superficial perineal pouch which later fills ant. Abdominal wall.

113. a) Mucosa is loosely associated to the underlying musculature

Mucosa is tightly adhered to the underlying musculature. Rest all options are true statements.

114. b) Broad Ligament

Broad Ligament is a peritoneal foldans is not a Support of the uterus

115. a) 12th rib & lateral border of sacrospinalis

Renal angle lies between 12th rib & lateral border of sacrospinalis (Erector spinae)

116. d) S_2-S_4 roots

Pudendal nerve supplying motor part to external sphincter is derived from S_2-S_4 roots

117. Ans

118. b) Anteriorly, below the superior mesenteric artery

Left renal vein crosses in front of the aorta from right to left towards the left kidney.It lies below the superior mesenteric artery (L-1 vertebral level) and above the renal artery (between L-1 and L-2 vertebra). Inferior vena cava lies on the right side of the midline, hence the left renal vein is the longer, as it crosses the midline to enter the IVC. The left renal vein may be compressed by an aneurysm of the superior mesenteric artery as the vein crosses anterior to the aorta. Patients with compression of the left renal vein may result in renal (and adrenal) hypertension on the left.

119. a) Ascending colon

a) Ascending colon – 5 inches
b) Transverse colon– 20 inches
c) Descending colon – 10 inches
d) Sigmoid colon–15 inches

120. a) Ischial spine

No Ureteric constriction is seen at Ischial spine

121. a) Straight tubules —> Rete testis —> Efferent tubules

Correct order of pathway for a spermis:- Straight tubules —> Rete testis —> Efferent tubules

122. a) Deep artery of penis

Deep arteries fill the lacunae of erectile tissue in corpus cavernosum. In the flaccid state of the penis, these vessels appear spiral hence termed helicine arteries.

123. c) The whole system is valveless

True about valves in portal venous system is that The whole system is valveless

124. d) Bulb of penis

Bulb of penis is content of superficial perineal pouch, rest all are the contents of deep perineal pouch

125. b) Splenic flexure

There are areas of colon with poor blood supply resulting from incomplete anastomosis of marginal arteries. These are watershed areas of colon and include:

1. Splenic flexure (Griffith point) : Water shed area between superior mesenteric artery and inferior mesenteric artery.
2. Rectosigmoid junction (Sudeck's point): Water shed zone between inferior mesenteric artery and internal iliac artery.

126. c) Inferior epigastric artery

127. d) Membranous urethra

Deep perineal pouch contains Membranous urethra, rest all options are present in superficial perineal pouch

128. c) Para-aortic L.N.

The lymphatic drainage of testes is Para-aortic L.N.

129. b) External iliac artery

Inferior epigastric artery branch of External iliac artery make anastomosis with superior epigastric artery

130. b) Gastric rugae

Gastric rugae is not a permanent mucosal fold

131. d) Greater Sac

Spleen projects into the Greater Sac.

132. c) Preaortic

Preaortic is the terminal group of lymph node for colon

133. c) Right gastroepiploic artery

Splenic artery gives left gastroepiploic artery & Right gastroepiploic artery
Is a branch of Gastroduodenal A.

134. c) Internal vertebral plexus of veins

Prostatic venous plexus communicates with Internal vertebral plexus of veins and is a possible route for spread of carcinoma.

135. c) Colle's fascia

Colle's fascia is boundary of superficial perineal pouch and not a part of Urogenital diaphragm

136. a) Right vagus

Nerve of grassi supplies the fundus of stomach.It is a branch of posterior (right) vagal trunk.

137. d) Lower third contains only skeletal muscle

In the upper third of the oesophagus, the muscularis externa is formed by skeletal muscle; in the middle third, smooth muscle fascicles intermingle with striated muscle; and this increases distally such that the lower third contains only smooth muscle.

Oesophagus is lined by a thick mucosa with the stratified squamous epithelium.

138. a) Fundus

a) Chief cells are usually basal (fundal) in location. They are the source of digestive enzymes like pepsin and lipase. These cells are cuboidal with round nucleus and contain lots of zymogen granules.

b) Parietal/Oxyntic cells produce hydrochloric acid and the intrinsic factor. These cells are oval with centrally placed nucleus. They are mainly located in the apical half of the body of gland, reaching as far as the neck.

c) Surface mucus cells are distributed in the gastric pit region of the gastric mucosa. Mucus neck cells are abundant in the neck region.

d) Neuroendocrine cells are situated mainly in the deeper/basal parts of the glands, along with the chief cells.

139. c) Paneth cell

- Most of the cells in the mucosa of small intestine are derived from the stem cells located in the basal

region of the crypts and this progeny migrate out along the wall of the crypts towards the villi (Paneth cell being an exception migrate towards the base).

- Paneth cells are present in the deeper parts of the intestinal crypts and not at the ends of villi. The villus has mainly the enterocytes and the goblet cells.
- Endocrine cells are numerous in the intestinal crypts but few of them lie over the villi as well.

140. b) Gastroduodenal artery

Right gastroepiploic artery is a branch of Gastroduodenal artery

141. c) Appendix

Appendix is not supplied by pelvic splanchnic nerves because it is not a pelvic organ.

142. b) Ischium

Sacrotuberous and sacrospinous ligaments attach sacrum to Ischium

143. a) Internal urethral sphincter

Internal urethral sphincter is absent in females.

144. b) Cystic artery

Cystic artery is a content of calots triangle

145. a) Internal thoracic artery

Branch of Internal thoracic artery is a content of rectus sheath & NOT Internal thoracic artery

146. d) Distal part of duodenum has a cap

- The first part of the duodenum has the duodenal cap or bulb and not the distal part.
- The first part of the duodenum is visible as a triangular shadow on barium studies and is known as duodenal cap.
- The small intestine contains mucosal folds known as plicae circulares or valvulae conniventes that are visible on barium studies and help in the distinction between small instestine and colon. Colon instead can be identified by presence of haustrations.
- Valvulae conniventes are more prominent in the jejunum giving the 'feathery appearance' on barium. These mucosal folds are generally reduced distally giving a 'featureless' appearance of distal ileum.

147. c) Accessory pancreatic duct

- Major duodenal papilla – Hepatopancreatic ampulla (opening of biliary pancreatic duct).
- Minor duodenal papilla – Accessory pancreatic duct opening.

148. a) Jejunum
b) Ileum

Valvulae conniventes are seen in
a) Jejunum
b) Ileum. These are typical feature of small intestine.

149. B, C & E

Ureter enters into bladder At lateral angle of trigone by Making an angle & is Valveless

150. b) Ureter

Rest all given options are felt on per rectal examination

151. c) Preaortic

- Terminal nodes for colon are superior mesenteric and inferior mesentric nodes (both are preaortic nodes).
- Preaortic lymph nodes are :- coeliac nodes, superior mesenteric nodes and inferior mesenteric nodes.

152. c) Duodenum

- Watershed area is a region of the body which is supplied by terminal part of two or more arteries.
- These areas are particularly vulnerable to ischemia because they are supplied by most distal part of arteries.
- Watershed areas -
  (i) Splenic flexure of colon
  (ii) Rectosigmoid junction Brain
  (iv) Spinal cord

153. a) Retrocaecal

- Most common position of appendix is retrocaecal

154. c) Anteromedial to lumbar sympathetic chain

Coeliac plexus is located Anteromedial to lumbar sympathetic chain

155. d) Sigmoid colon

Appendices epiploicae present in Sigmoid colon & absent in rest of the given options.

156. b) Between int. oblique and transverses abdominis

Between int. oblique and transverses abdominis

157. a) 2, 3

- Segments 2 & 3 lie to the left of the falciform ligament and will be resected in this patient.
- Couinaud's classification divides liver into various segments based upon the distribution of portal & hepatic veins.
- Major removal of liver segments follows the Couinaud's classification for putting the lines of resection.
- The hepatic veins provide surgical planes to dissect the liver, but the surgeon has to bear with the hemorrhage, as they are followed and are a major source of bleeding during dissection.

158. c) Pelvic fascia

Hypogastric sheath is a condensation of Pelvic fascia and carries neurovascular structures in it.

159. Ans.

160. a) Anterolateral to Aorta

Anterolateral to Aorta is most appropriate answer here.

161. d) Duodenum

Portocaval (portosystemic) anastomosis is not seen at Duodenum

162. d) All of the above

In portal hypertension, the sites of portosystemic anastomosis includes All of the above

163 b) Genitofemoral nerve

Genitofemoral nerve is not a content of rectus sheath.

164. d. Uterus and rectum

Pouch of Douglas is situated between Uterus and rectum and is most dependent pouch in erect posture.

165. A, C & D

Femoral branch of genitofemoral nerve, Psoas major and Femoral vein are contents of Femoral triangle and hence pass behind the inguinal ligament.

Head, Face, Neck and Brain – Questions

Q1. A 68-year-old woman presents in the emergency room with dizziness and nystagmus. Examination reveals a loss of pain and temperature sensation over the right side of the face and the left side of the body. The patient exhibits ataxia and intention tremor on the right in both the upper and lower extremities and is unable to perform either the finger-to-nose or heel to-shin tasks on the right. In addition, she is hoarse and demonstrates papillary constriction and drooping of the eyelid on the right. Finally, the right side of her face is drier than the left. Which of the following artery block would explain the patient's condition:

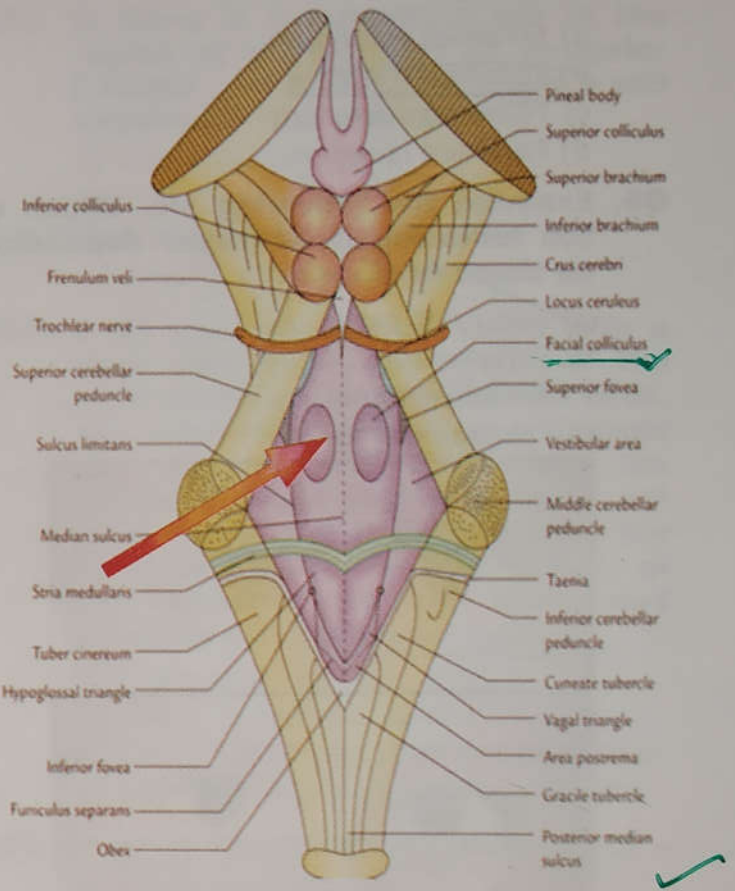
a) Right posterior inferior cerebellar artery
b) Left posterior inferior cerebellar artery
c) Right anterior inferior cerebellar artery
d) Basilar artery

Q2. A middle-aged women complained that her right-hand tremors when she attempts to insert a thread in the eye of sewing needle; and her body sways towards the right side while walking. On physical examination the Physician found that: there is flaccidity of limb muscles on the right side, and when she was asked to touch the tip of her nose with her right index finger, the finger tended to overshoot the target. Which part of the Brain is affected?

a) Basal Nuclei b) Thalamus
c) Cerebellum d) Cerebrum

Q3. Damage to the structure producing the elevation marked leads to paralysis of which of the following muscle?

a) Lateral rectus
b) Risorius
c) Levator palpebrae Superioris
d) Superior oblique



Q4. The marked structure in the diagram is involved with motor activites. It receives afferents from all of the following EXCEPT:

a) Spinal cord b) Thalamus
c) Cerebral cortex d) Substantia nigra

Horizontal Sections through Cerebrum

1. a	2. c	3. b	4. a

Q5. A patient recovering from a traumatic injury to the face now finds himself unable to chew his food. On physical examination, his jaw deviates to the right side. The nerve that has been injured in this patient exits the skull through which of the following foramina?

a) Foramen rotundum
b) Foramen ovale
c) Foramen spinosum
d) Foramen lacerum

Q6. Examine the following pic. Which of the following is damaged depending on these findings?

a) Abducent nerve
b) Facial nerve
c) Trochlear nerve
d) Oculomotor nerve

Q7. Which of the following clinical finding is not seen in lesions of structures passing through jugular foramen:

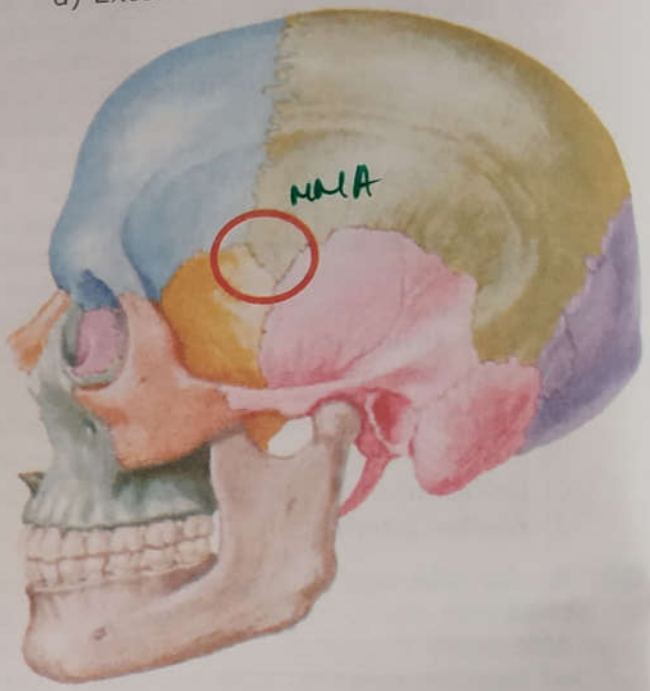
a) Palatal paralysis
b) Difficulty in shrugging of shoulder
c) Loss of sensation from the floor of mouth
d) Loss of taste sensation in posterior 1/3rd of tongue

Q8. Dorello's canal transmits:

a) Middle meningeal artery
b) Mandibular nerve
c) Superior alveolar branch of maxillary
d) Abducent nerve

Q9: Artery lying deep to marked area in the given Pic is branch of which of the following artery.?

a) Ophthalmic Artery
b) Maxillary Artery → MMA
c) Internal Carotid Artery
d) External Carotid Artery



Q10. One of the following opens in the middle meatus of the nose:

a) Naso-lacrimal duct
b) Eustachian tube
c) Sphenoidal air sinus
d) Maxillary air sinus

Q11. Lateral wall of cavernous contains all of the following nerves except:

a) Oculomotor
b) Maxillary
c) Ophthalmic
d) Abducent

Q12. Palsy of right genioglossus causes:

a. Deviation of tongue to right side
b. Deviation of tongue to left side
c. Deviation of soft palate to right side
d. Deviation of soft palate to left side

5. b	6. a	7. c	8. d	9. b	10. d	11. d	12. a

Q13. Safety muscle of larynx:
a. Lateral cricoarytenoid
b. Transverse artenoid
c. Posterior cricoarytenoid
d. Cricothyroids

Q14. Parotid duct passes through all the following structures EXCEPT:
a. Buccopharyngeal fascia
b. Buccinator
c. Buccal fat pad
d. Masseter

Q15. Muscle responsible for intorsion of the eye:
a. Superior oblique
b. Superior rectus
c. Both of the above
d. None of the above

Q16. Nerve to pterygoid canal/ vidian nerve is formed by :
a) Deep petrosal nerve + greater petrosal nerve
b) Facial nerve
c) Lesser superficial petrosal nerve
d) Lesser petrosal nerve

Q17. Primary auditory area is :
a) Inferior temporal gyrus
b) Occipital cortex
c) Superior temporal gyrus
d) Frontal cortex

Q18. A 46-year-old man complains of dryness of the mouth. On examination he lack salivary secretion from the submandibular gland. This indicates a lesion of which of the following nervous structures?
a. Greater petrosal nerve
b. Chorda tympani in the middle ear cavity
c. Superior cervical ganglion
d. Lesser petrosal nerve

Q19. Anterior belly of digastric is a derivate of :
a) 1st branchial arch
b) 2nd branchial arch
c) 3rd branchial arch
d) 4th branchial arch

Q20 Which part of the ear has origin from all the three layer of germ layer :
a) Auricle
b) Tympanic membrane
c) Ossicles
d) Middle ear cavity

Q21 If there is a superficial cut in the region of middle part of posterior triangle of neck, patient will experience problem in:
a) Adduction of arm
b) Pronating scapula
c) Shrugging of shoulder
d) abduction of arm

Q22. A 43 year old woman came with a large abscess in the middle of the right posterior triangle of the neck. The physician incised and drained the abscess. Five days later the patient noticed that she could not extend her right hand above her head to brush her hair. Which of the following are the signs and symptoms of additional harm -
a) Damage to scalenus medius
b) Injury to suprascapular nerve
c) Cut to spinal part of accessory nerve
d) Spread of infection to shoulder joint

Q23. Inferior Thyroid artery is branch of –
a) Thyrocervical trunk
b) Costocervical trunk
c) Transverse cervical artery
d) External carotid artery

Q24. The optic foramen is located between-
a) Greater wing and lesser wing of sphenoid
b) Greater wing and body of sphenoid
c) Lesser wing and body of sphenoid
d) Lesser wing of sphenoid and ethmoid

Q25. All of the following statements regarding the oculomotor nerve are true except -
a) It accommodates the eye
b) It raises the upper evelid
c) It innervates lateral rectus
d) It constricts the pupil

13. c	14. d	15. c	16. a	17. c	18. b	19. a	20. b
21. c	22. c	23. a	24. c	25. c			

C.T to S.M gland

Q26. Uncinate process of ethmoid attached anteriorly to:

a. Sphenoid
b. Ethmoid
c. Frontal
d. Lacrimal bone

Q27. The lacrimal duct open in the – (PGI85)

a) superior turbinate
b) Middle meatus
c) Inferior meatus
d) None of the above

Q28. The Thinnest wall of the human orbit is-

a) Roof
b) Medial wall
c) Floor
d) Lateral wall

Q29. Sensory nerve supply of middle ear cavity is provided by

a) Facial
b) Glossopharyngeal
c) Vagus
d) Trigeminal

Q30. Narrowest part of middle ear- (PGI)

a) Epitympanum
b) Hypotympanum
c) Anterior tympanum
d) Mesotympanum

Q31. Inner ear is present in which bone - (PGI98)

a. Occipital
b. Petrous part of temporal bone
c. Squamous part of temporal
d. Parietal bone

Q32. The cervical oesphagus receive its blood supply from the – (PGI

a) Superior thyroid artery
b) Inferior thyroid artery
c) Facial artery
d) Lingual artery
e) Bronchial artery

Q33. Throat pain radiating to the ear following tonsillectomy is due to

a) Persistent infection
b) Injury to IX nerve
c) Injury to X nerve
d) Injury to eustachian tube –

Q34. Pain in post 1/3 tongue after tonsillectomy is due to injury to-

a) VII nerve
b) IX nerve
c) V nerve
d) XII nerve

Q35. Skin at angle of Jaw is supplied by

a. Mandibular Nerve
b. maxillary Nerve
c. Greater Auricular N
d. Transverse cutaneous N of neck

Q36. All are seen in 3rd nerve palsy except-

a) Mydriasis
b) Ptosis
c) Outward deviation of eye
d) Miosis

Q37. Cranial nerve emerging between pyramidal and olive eminence is

a. 6th CN
b. 7th CN
c. 11th CN
d. 12th CN

Q38. Subarachanoid space ends at

a) S4
b) S2
c) 12
d) L3

Q39. Blood supply of hippocampus

a. Anterior choroidal artery
b. Medial striate artery from middle cerebral artery
c. Lateral striate artery from middle cerebral artery
d. Anterior cerebral artery

Q40. Carotid sheath contains all except - (PGI)

a) Cartoid artery
b) Internal jugular vein
c) Vagus nerve
d) Phrenic nerve

Q41. Secretomotor fibres to the parotid is via - (PGI)

a) Auriculo - temporal nerve
b) Facial nerve
c) Trigeminal nerve
d) Maxillary nerve

26. d	27. c	28. b	29. b	30. d	31. b	32. b	33. b	34. b	35. c	36. a
37. d	38. b	39. a	40. d	41. a						

Q42. The relation of facial nerve branches to parotid gland is-

a) Deep
b) Superficial
c) In the Substance of parotid
d) None

Q43. upper covering layer of cochlear duct is:

a. Tectorial membrane
b. Basilar membrane
c. Stria vascularis
d. Vestibular membrane

Q44. Fate of 6th aortic arch:

a. Arch of aorta in between left common carotid artery and left subclavian artery
b. Ductus arteriosus
c. Right brachiocephalic
d. Left subclavian artery

Q45. Which of the following are features of Horner's syndrome- (PGI)

a) Ptosis b) Miosis
c) Mydriasis d) Anhydrosis

Q46. Which of the following is the site of cerebellar input?

a) Inferior olivary nuclei
b) Vestibular nuclei
c) Globose and emboliform nuclei
d) Dentate nucleus

Q47. Chassaignac's tubercle is – (PGI)

a) Below the level of crioid cartilage
b) Above the level of cricoid cartilage
c) At the same levels as cricoid cartilage
d) Present at C_7 level

Q48. Following foramina are found in greater wing of sphenoid, except

a) Rotundum b) Ovale
c) Spinosum d) Optic canal

Q49. The internal thoracic veins are tributaries of the- (PGI

a) Azygos b) Subclavian
c) Internal jugular d) Brachiocephalic

Q50. Internal laryngeal nerve supplies

a) Cricothyroid muscle
b) Vocalis
c) Mucous membrane above vocal fold
d) Mucous membrane below vocal fold

Q51. Which of the following could result from a destructive lesion of the left oculomotor nerve - (PGI)

a) Loss of left pupillary constriction when light is shone in the left eye
b) Loss of left pupillary constriction when light is shone in the eye
c) Pupillary dilation (mydriasis) in the left eye
d) Paralysis of the ciliary muscle in the left eye
e) None

Q52. Which of the following statements regarding the pharynx is/are correct - (PGI)

a) The opening of the auditory tube is located in the lateral wall of the nasopharynx
b) The soft palate is at the level of separation of the laryngopharynx and the oropharynx
c) The pharynx is continuous with the esophagus at the level of the sixth cervical vertebra
d) The afferent limb of the gag reflex is cranial nerve X; the efferent limb is cranial nerve IX

Q53. Sixth pharyngeal arch gives rise to:

a) Sternohyoid b) Cricothyroid
c) Cricoarytenoid d) Stylopharyngeus

Q54. During surgery, which of the following anatomical landmark is closely associated with geniculate ganglion?

a) Pyramid
b) Short process of incus
c) Processes cochleariformis
d) Oval window

Q55. The posterior 1/3 of the tongue is supplied by nerve

a) Hypoglossal b) Chorda tympani
c) Lingual d) Glossopharyngeal

42. c	43. a	44. b	45. a,b,d	46. a	47. c	48. d
49. b	50. c	51. a,b,c,d	52. a,c	53. c	54. c	55. d

Q56. Internal carotid artery at the bifurcation from the common carotid is - (PGI)
a) Lateral to the external carotid
b) Medial to external carotid
c) Post to external carotid
d) Anterior to external carotid

Q57. A patient presented with pustule over the dorsum of nose and upper lip. Which is the most direct route of spread of this infection to cavernous sinus?
a) Angular vein to ophthalmic vein to cavernous sinus
b) Dorsal nasal vein to maxillary vein to cavernous sinus
c) Facial vein to pterygoid plexus to cavernous sinus
d) Palatine vein to ophthalmic vein to cavernous sinus

Q58. Vein of labbe is:
a) Superior anastomotic vein
b) Inferior anastomotic vein
c) Superior cerebral vein
d) Superficial middle cerebral vein

Q59. Foramen transversarium transmit
a) Inferior jugular vein
b) Inferior petrosal sinus
c) Sigmoid sinus
d) Vertebral artery

Q60. Lymph from the tonsils drain into the- (PGI)
a) Jugulo omohyoid node
b) Jugulo digastric node
c) Submental node
d) Upper deep cervical node

Q61. The cranial nerve with the longest intracranial course - (PGI
a) Optic
b) Abducent
c) Trigeminal
d) Oculomotor
e) Trochlear

Q62. The largest ganglion in the neck is
a) Superior ganglion
b) Middle ganglion
c) Stellate ganglion
d) Second thoracic ganglion

Q63. Crieothyroid is supplied by-
a) Recurrent laryngeal nerve –
b) Internal laryngeal nerve
c) External laryngeal nerve
d) Hypoglossal nerve

Q64. The cavernous sinus communicates directly with afl. except
a) Inferior petrosal sinus
b) Pterygoid venous plexus
c) Veins in orbit
d) Sigmoid sinus and straight sinus

Q65. Arcuate eminence of the petrous temporal bone is caused by
a) Superior semicircular canal
b) Posterior semicircular canal
c) Lateral semicircular canal
d) Cochlea

Q66. Cranial nerve that lies between superior cerebellar artery and posterior cerebral artery is:
a) Oculomotor nerve
b) Optic nerve
c) Abducens nerve
d) Trigeminal Nerve

Q67. Middle thyroid vein drains into vein - (PGI88)
a) External jugular
b) Anterior jugular
c) Internal jugular
d) Brachiocephalic

Q68. The actions of superior oblique muscle is-
a) Abduction
b) Intorsion
c) Extorsion
d) Depression

Q69. Which of the following regarding mandibular nerve is correct
a) Branch of facial nerve
b) Purely motor
c) Passes through foramen ovale
d) Related to sphenopalatine ganglion

56. a	57. a	58. b	59. d	60. b	61. e	62. a	63. c	64. d
65. a	66. a	67. c	68. a,b,d	69. c				

Q70. The actions of superior oblique muscle is-

a) Abduction b) Intorsion
c) Extorsion d) Depression

Q71. Where is cilliry ganglion located in the orbit -

a) Between optic nerve and lateral rectus
b) Apex of orbit
c) Apex of orbit and superior rectus
d) Apex of orbit between optic nerve and lateral rectus

Q72. Structures passing through the foramen magnum are- (PGI)

a) Spinal cord
b) Vertebral artery
c) Internal jugular vein
d) XI cranial nerve

Q73. What structure lies in the floor of sphenoidal air sinus?

a) Vidian nerve
b) Mandibular nerve
c) Greater petrosal nerve
d) Maxillary nerve

Q74. Structure passing through Sinus of Morgagni:

a) Levator veli palatine
b) Ascending pharyngeal artery
c) Glossopharyngeal nerve
d) Tensor tympani

Q75. The only pharyngeal muscle innervated by the glosspharyngeal nerve is the - (NIMHANS89, Kerala 94)

a) Stylo pharyngeus
b) Palato pharyngeus
c) Superior constricter
d) Middle constricter

Q76. The retina is an out growth of the

a) Mesencephalon b) Diencephalon
c) Telencephalon d) Pons

Q77. Retraction of the protruded mandible is done by-(PGI)

a) Medial pterygoid
b) Lateral pterygoid
c) Masseter
d) Temporalis

Q78. A child with chronic suppurative otitis media, develops recurrent meningitis. The spread of infection to CNS most probably occurred through:

a) Hyrtl's fissure / Tympanomeningeal fissure
b) Foramen of Luscha
c) Fissure of Santorini
d) Persistent pterosquamous septum

Q79. Which structure passes through infra orbital fissure

a) Superior ophthalmic vein
b) Ophthalmic artery
c) Trochlear nerve
d) Zygomatic nerve

Q80. Artery palpable at the anterior border of masseter is artery

a) Superficial temporal
b) Facial
c) Lingual
d) Maxillary

Q81. Which of the following pharyngeal arch give rise to the development of branchial fistula extending from base of tongue to anterior border of sternocleidomastoid?

a) 1 st arch b) 2 nd arch
c) 3 rd pouch d) 4 th arch

Q82. Which among the following is/ are true regarding anatomy of the parotid gland? 2nd

a) Stenson's duct opens near 3rd molar
b) Facial nerve branches divide it into superficial and deep parts
c) Deep part projects into the parapharyngeal space
d) Pierced by retromandibular vein and facial artery ECA, FN, RMV

Q83. Parasympathetic division innervates-

a) Dilator pupillae b) Errectorpilorum
c) Muller's muscle d) Detrusor muscle

Q84. Which is true about opening of jaw-

a) Lateral pterygoid muscle contracts
b) Movement in vertical axis
c) Articular disc moves backwards
d) Head of the mandible moves forwards

70. b,d	71. d	72. b,d	73. a	74. a	75. a	76. b	77. c,d
78. a	79. d	80. b	81. b	82. b,c	83. a	84. a,b,d	

Q85. Taste sensation from the anterior 2/3 of tongue is carried by

a) Hypoglossal Nerve
b) Chorda tympani
c) Glossopharyngeal N.
d) All of the above

Q86. The tip of the nose is supplied by

a) Maxillary N.
b) Mandibular N.
c) Ophthalmic N.
d) Facial N.

Q87. In an embryo, the 4th arch forms?

a) Aortic arch
b) Right subclavian artery
c) Right pulmonary artery
d) Left pulmonary artery
e) Left subclavian artery

Q88. General sensation to the posterior one-third of the tongue is mediated by the

a) Hypoglossal nerve
b) Vagus nerve
c) Glossorpharyngeal nerve
d) Lingual nerve

Q89. Which is not a content of tympanic cavity

a) Maleus
b) Chorda tympani
c) Stapedius
d) Post.auricular N

Q90. Cough Receptors are not seen in - (AIIMS 92)

a) Soft palate
b) Ear
c) Bronchi
d) Trachea

Q91. Waldeyer's internal ring component(s) include?

a) Jugulo-digastric LNs
b) Jugulo-omohyoid LNs
c) Tubal tonsils
d) Palatine tonsils
e) Adenoids

Q92. The Thinnest cranial nerve is the

a) Olfactory
b) Oculomotor
c) Trochlear
d) Accessory

Q93. Lamina cribrosa is a modification of

a) Sclera
b) Choroid
c) Optic nerve sheath
d) Retina

Q94. True about epiglottis is/are?

a. Contains serous glands
b. Blood supply derived from superior thyroid artery
c. Lymphatics drain to deep cervical lymph nodes
d. Elastic cartilage forms epiglottis
e. Sensory supply derived from vagal nerve branches

Q95. Anterior Spinal artery is a branch of

a) Internal Carotid artery
b) Basilar artery
c) Vertebral artery
d) Labyrinthine artery

Q96. The vein of galen drains into

a) IVC
b) Straight Sinus
c) Superior sagittal sinus
d) SVC

Q97. Which among the following does not pass through superior orbital fissure

a) Oculomotor nerve
b) Optic nerve
c) Ophthalmic division of trigeminal
d) Trochlear

Q98. All the muscles of the face are supplied by facial nerve except

a) Levator anguli oris
b) Corrugator supercilli
c) Levator palperae superioris
d) Risorius

Q99. Tip of tongue drains into

a) Occipital lymph node
b) Submental lymph node
c) Deep cervical lymph nodes
d) Tonsillar lymph nodes

85. b	86. c	87. a	88. c	89. d	90. a	91.c,d,e	92. c	93. a
94. b,c,d,e	95. c	96. b	97. b	98. c	99. b			

Q100. Structure(s) which traverse parotid gland include?

a. Facial artery
b. Retromandibular vein
c. External carotid artery
d. Cervical branch of facial nerve
e. Lingual nerve

Q101. Glossopharyngeal nerve gives

a) Tympanic nerve
b) Pharyngeal plexus
c) Tonsillar branches
d) All of the above

Q102. All of the following structures are in lateral wall of cavernous sinus except

a) Oculomotor b) Trochlear
c) Mandibular d) Ophthalmic

Q103. All of the following structures are related to cavenous sinus except –

a) Optic nerve
b) 4th nerve
c) 6th nerve
d) Mandibular division of trigeminal nerve

Q104. Trigeminal nerve does not supply

a) Masseter
b) Buccinator
c) Anterior belly of digastric
d) Lateral Pterygoid

Q105. Alderman's nerve is -(PGI)

a. branch of Superior cervical ganglion
b. branch of Inferior cervical ganglion
c. Auricular branch of Vagus nerve
d. Tympanic branch of Glossopharyngeal nerve

Q106. Cranial accessory nerve supplies-

a) Sternomastoid
b) Trapezius
c) Splenius capitis
d) Soft palate

Q107. Palsy of right genioglossus causes -

a) Deviation of tongue to right
b) Deviation of tongue to left
c) Deviation of soft palate to right
d) Deviation of soft palate to left

Q108. True regarding trochlear nerve?

a. Arises from dorsal aspect of brain
b. Smallest cranial nerve but longest intracranial course
c. Damage causes ipsilateral superior oblique muscle palsy
d. Nucleus located in caudal mesencephalon below cerebral aqueduct
e. Descends between anterior and middle cerebral arteries

Q109. Depressor of Mandible

a) Median pterygoid
b) Masseter
c) Lateral pterygoid
d) Temporalis

Q110. Nerve of pterygoid canal is – (PGI)

a) Sympathetic + Lesser pertrosal nerve
b) Sympathetic + greater superficial petrosal nerve
c) Chorda Tympani
d) Jacobson's nerve

Q111. Tympanic plexus is formed by – (PGI)

a) Tympanic branch of glossopharyngeal nerve
b) Vagus nerve
c) Facial nerve
d) Mandibular nerve

Q112. Features of trigeminal nerve injury include?

a. Loss of corneal reflex
b. Weakness in closure of jaw
c. Weakness in mastication
d. Sensory loss of face
e. Paralysis of temporalis and masseter muscle

Q113. The secetomotor fibre to the parotid gland passes through

a) Otic ganglion
b) Sphenopalatine ganglion
c) Geniculate ganglion
d) Lesser ganglion

100. b,c,e	101.d	102. c	103. a	104. b	105. c	106. d	107.a
108. a,b,c,e	109. c	110. b	111.a,b	112.a,b,c,d,e	113. a		

Q114. Safety muscle of the tongue is

a) Hyoglossus
b) Genioglossus
c) Palatoglossus
d) Styloglossus

Q115. Superior cerebral veins drain into

a) Great cerebral vein
b) Vein of galen
c) Superior sagittal sinus
d) Inferior sagittal sinus

Q116. Facial N. supply all except

a) Lacrimal gland
b) Nasal gland
c) Submandibular gland
d) Parotid gland

Q117. Subcutaneous muscle extending from the clavicle to the mandible

a) Platysma
b) Sternocledomastoid
c) Omohyoid
d) Sternohyoid

Q118. Muscles of tongue are supplied by

a) Lingual nerve
b) Glosso pharyngeal nerve
c) Chorda tymapni
d) Hypoglossal

Q119. Cranial part Accessory nerve supplies all palatal muscles except

a) Palato glossus
b) Palato pharyngeus
c) Tensor veli palate
d) Levator palati

Q120. Nasolacrimal duct is directed

a) Downward, medially, backwards
b) Downward, laterally, backwards
c) Downward, laterally, forward
d) Downward, medially, forward

Q121. Structure(s) seen in pons but not seen in medulla (olivary level section) include the following:

a. Middle cerebellar peduncle
b. Inferior cerebellar peduncle
c. Part of fourth ventricle
d. Nucleus ambiguous
e. Motor nucleus of CN V

Q122. True statement(s) about parotid gland is/are?

a. 2nd largest salivary gland
b. Stenson's duct opens behind upper 3rd molar
c. Divided by branches of facial nerve
d. Lymph nodes are embedded in the gland
e. Only benign tumours arise from parotid gland

Q123. True regarding surgical anatomy of thyroid gland?

a. Berry ligament arises from deep cervical fascia
b. Thyroid enclosed between 2 layers of deep cervical fascia
c. Longer course of recurrent laryngeal nerve on left than right
d. Superior thyroid artery related closely to external laryngeal nerve
e. Superior parathyroid glands located ventral to the recurrent laryngeal nerve

Q124. Skin over the angle of mandible and parotid area is supplied by

a) Greater auricular nerve
b) Posterior auricular nerve
c) Auriculotemporal nerve
d) Facial nerve

Q125. Psuedounipolar neurons are seen in

a. Olfactory
b. Celiac ganglion
c. Spinal dorsal root ganglion
d. Cochlea

Q126. Which of the cranial nerve decussate within the brain

a) Trochlear
b) Optic
c) Oculomotor
d) Trigeminal

114. b	115. c	116. d	117. a	118. d	119. c	120. b	121. a,e	122. c,d
123. a,c,d	124. a	125. c	126. a					

Q127. Sensory nerve supply of pinna is

a) Mandibular nerve
b) Maxillary nerve
c) Facial nerve
d) Abducent nerve

Q128. Trigeminal nerve has how many nuclei in CNS

a) Three b) Four
c) Five d) Six

Q129. Branch(s) of ophthalmic artery include?

a. Central retinal artery
b. Posterior ciliary artery
c. Anterior choroidal artery
d. Anterior ciliary artery
e. Short posterior ciliary artery

Q130. Lacrimal gland is supplied which of the following ganglia

a) Otic ganglia
b) Ciliary ganglion
c) Spenopalatine ganglion
d) Submandibualr

Q131. The following ligaments are present in temporomandibular joint, except

a. Lateral temporomandibular ligament
b. Sphenomandibular ligament
c. Stylomandibular ligament
d. Alar ligament

Q132. The roof of the olfactory region is formed by

a) Nasal bone
b) Cribriform plate of ethmoid
c) Sphenoid
d) Temporal bone

Q133. Ipsilateral deviation of tongue is due to paralysis of

a) Genioglossus
b) Medial pterygoid
c) Hyoglossus
d) Lateral pterygoid

Q134. Dorello's canal transmits in tip of temporal bone to en route to cavernous sinus - (PGI)

a. Middle meningeal artery
b. Mandibular nerve
c. Superior alveolar branch of maxillary
d. Abducent nerve

Q135. First branch of focial nerve is- (PGI)

a) Chorda tympani
b) Nerve to stapedius
c) Lesser superficial petrosal N
d) Greater superficial petrosal N

Q136. Structures passing through Foramen Rotundum is -

a) Oculomotor nerve
b) Trochlear nerve
c) Lacrimal nerve
d) Maxillary nerve

Q137. Structures passing through Foramen ovale-

a) Oculomotor nerve
b) Trochlear nerve
c) Lacrimal nerve
d) Mandibular nerve

Q138. Structures passing through jugular Foramen -

a) Oculomotor nerve
b) Trochlear nerve
c) Lacrimal nerve
d) Glossopharyngeal nerve

Q139. Which of the following statements is true regarding the pituitary gland-(PGI)

a. It is separated from the optic chiasma by the sells turcica
b. It is situated deep in the sella
c. The spenoidal air cells lie inferior to it
d. It develops from the base of the 3rd ventricle from the pars anterior
e. It is supplied by a branch of the internal carotid artery

127. c	128. b	129.a,b,e	130. c	131. a	132. b	133. a	134. a
135. d	136. d	137. d	138.d	139.a,b,c,d			

Q140. The recurrent laryngeal nerve supplies - (PGI)

a) Vocalis muscle
b) Posterior cricoarytenoid
c) Cricothyroid
d) Stylopharyngeus
e) Omohyoid

Q141. Which of the following are draining channels of cavernous sinus-(PGI 02)

a Inferior petrosal sinus
b) Inferior opthalmic vein
c Sphenoparietal sinus
d) Middle cerebral vein
e) Superior ophthalmic vein

Q142. Which of the following is first branch of the external carotid artery

a) Superior thyroid artery
b) Anterior Ethmoidal artery
c) Occipital artery
d) Posterior auricular artery

Q143. Which of the following transmits a nerve branch to the meninges

a) Foramen spinosum → recurrent meningeal N of mandibular N
b) Mastoid foramen
c) Jugular foramen
d) Foramen magnum

Q144. Regarding the flow of Cerebrospinal fluid, which one of the following sequences is correct

a) Lateral ventricle - third ventricle - aqueduct of Sylvius - fourth ventricle
b) Fourth ventricle - third ventricle - aqueduct of Sylvius - lateral ventricle
c) ateral ventricle - aqueduct of Sylvius - lateral ventricle - fourth ventricle
d) Lateral ventricle - third ventricle - fourth ventricle - aqueduct of Sylvius.

Q145. Which of these is not a tributary of cavernous sinus

a) Sphenoparietal sinus
b) Superior petrosal sinus
c) Superficial middle cerebral vein
d) Inferior ophthalmic vein

Q146. Tensor tympani is supplied by . (SGPGI 05, PGI97)

a) Maxillary branch of 5th nerve
b) Mandibular branch of 5th nerve
c) Facial nerve
d) Lingual nerve

Q147. All of the following are grouped together as "muscles of mastication" except

a) Buccinator b) Masseter
c) Temporalis d) Pterygoids

Q148. A patient presented with normal eyesight and absence of direct and consensual light reflexes. Which of the following cranial nerves is suspected to be lesioned

a) Occulomotor
b) Trouchlear
c) Optic
d) Abducent

Q149. The following are supplied by XII cranial nerve except

a) Palatoglossus
b) Genioglossus
c) Hypoglosus
d) None

Q150. Which of the following is not supplied by ansacervicalis

a) Sternothyroid
b) Thyrohyoid
c) Sternohyoid
d) Omohyoid

140. a, b	141. a	142. a	143. a	144. a	145. b
146. b	147. a	148. a	149. a	150. b	

Head, Face, Neck and Brain – Explanations

1. a) Right posterior inferior cerebellar artery

It is lateral medullary syndrome on right side & hence Right posterior inferior cerebellar artery is the cause.

2. c) Cerebellum

All the given features indicate Cerebellar syndrome

3. b) Risorius

Marked elevation is Facial colliculus which is produced by Facial nerve, so muscle paralysed will be risorius

4. a) Spinal cord

It receives No afferent from Spinal cord whereas Thalamostriate, Nigrostriate and Corticostriate fibres are afferent to Striatum.

5. b) Foramen ovale

All the given features indicate that Mandibular nerve is involved hence Foramen ovale is correct

6. a) Abducent nerve

Lateral rectus of right side is paralysed because while attempting to look to right only left eye is moving whereas right eye is looking straight

7. c) Loss of sensation from the floor of mouth

9, 10 & 11 cranial nerves exit from jugular foramen Palate, Pharynx and Larynx paralysis will be seen but Sensation from floor of mouth are carried by mandibular nerve ,so it won't be affected by jugular foramen involvement

8. d) Abducent nerve

Abducent nerve passes through it

9. b) Maxillary Artery

Marked area is Pterion and Middle Meningeal artery lies deep to pterion which is a branch of Maxillary artery

10. d) Maxillary sinus

Maxillary sinus opens in middle meatus

Nasolacrimal duct opens in inferior meatus

Sphenoidal sinus opens in supreme meatus

Eustachian tube opens behind inferior concha

11. d) Abducent nerve

Abducent nerve passes through the cavernus sinus not along its lateral wall

12. a) Deviation of tongue towards right side

Deviation of tongue towards affected side because Normal side genioglossus will push towards affected side.

13. c) Posterior cricoarytenoid

Because it is the only abductor of vocal cords

14. d) Masseter

Parotid duct ~~passes through~~: 3B's

- Buccopharyngeal fascia
- Buccinator
- Buccal fat pad

It doesnot pierce masseter

15. c) Both of the above

Among Extraocular muscle, Superior muscles are Intorters and Inferior muscles are Extorters

Hence, Both Superior oblique & Superior rectus are intorters

16. a) Deep petrosal nerve + greater petrosal nerve

These two together pass through Pterygoid canal and are known as vidian nerve.

17. c) Superior temporal gyrus

It is present in Superior temporal gyrus

18. b) Chorda tympani in the middle ear cavity

Because Greater petrosal nerve is carry the salivatory fibres to Submandibular gland

19. a) 1st branchial arch

Ref: Read the text below

Anterior belly of digastric is derived from first arch

Posterior belly of digastric is derived from Second arch

20. b) Tympanic membrane

Ref: Read the text below

Tympanic membrane has origin from all the three layer of germ layer

21. c) Shrugging of shoulder

Superficial cut in the region of middle part of posterior triangle of neck will lead to injury to Spinal Accessory nerve, hence muscle supplied by it (trapezius) is paralysed. Therefore Shrugging of shoulder will be affected

22. c) Cut to spinal part of accessory nerve

Superficial cut in the region of middle part of posterior triangle of neck will lead to injury to Spinal Accessory nerve, hence muscle supplied by it (trapezius) is paralysed. Therefore Shrugging of shoulder and Overhead Abduction of arm (for combing of hair) will be affected

23. a) Thyrocervical trunk

Inferior Thyroid artery is branch of Thyrocervical trunk

Superior Thyroid artery is branch of External Carotid artery

24. c. Lesser wing and body of sphenoid

The optic foramen is located between Lesser wing and body of sphenoid

25. c. It innervates lateral rectus

It innervates all Extraocular muscles except lateral rectus which is supplied by Abducent nerve and Sup. Oblique which is supplied by Trochlear nerve

26. (d) Lacrimal bone

Uncinate Process:

Is a thin, hook like structure projecting downward and backward from the middle concha of ethmoid bone and joins with ethmoidal process of inferior nasal concha. Its posterosuperior margin is free, forming the hiatus semilunaris.

It is related anteriorly the descending process of lacrimal bone.

27. c) Inferior meatus

The lacrimal duct open in the Inferior meatus

28. b) Medial wall

The Thinnest wall of the human orbit is Medial wall

The most fractured wall of the human orbit is Floor.

29. b) Glossopharyngeal

Sensory nerve supply of middle ear cavity is provided by Glossopharyngeal.

30. d) Mesotympanum

a) Epitympanum - 6 mm
b) Hypotympanum - 2 mm
c) Mesotympanum - 4 mm

31. b) Petrous part of temporal bone

Inner ear is present in Petrous part of temporal bone

32. b) Inferior thyroid artery

The cervical oesphagus receive its blood supply from the Inferior thyroid artery

33. b) Injury to IX nerve

Injury to IX nerve leads to referred pain.

34. b) IX nerve

Injury to IX nerve leads to referred pain.

35. c) Greater Auricular N

Greater Auricular N gives a branch which supplies Skin at angle of Jaw

36. ~~a) Mydriasis~~ Miosis

Miosis is seen in 3rd nerve palsy not Mydriasis.

37. d) 12th CN

Pyramid: A prominent elongated ridge, which contains descending corticospinal axons, that lies immediately lateral to the ventral median fissure.

Olive: Lateral to the pyramid and

the ventrolateral sulcus is an oval prominence, which contains the inferior olivary nuclear complex.

The lateral margin of the pyramid is indicated by a shallow ventrolateral sulcus. A linear series of rootlets forming the hypoglossal nerve emerge from this sulcus.

38. b) S2

Subdural space/ Subarachanoid space ends at S2.

39. a) Anterior choroidal artery

Ref: Essentials of Neuroanatomy, A.K. Datta, 3rd edition, 2007, page 176

Anterior Choroidal Artery:

- Arises from internal carotid artery.
- Undergoes long subarachnoid course and inferior horn lateral v. where hippocampus is located.
- Supplies hippocampus
- It also supplies:
  - Optic tract, uncus, amygdala, globus pallidus.
  - Lateral geniculate body.
  - Posterior limb and retrolentiform part of internal capsule.

40. d) Phrenic nerve

Phrenic nerve is not a content of carotid sheath which contains Common & Internal Cartoid artery, Internal jugular vein and Vagus nerve

41. a) Auriculo - temporal nerve

Secretomotor fibres to the parotid is via Auriculo - temporal nerve

42. c) In the Substance of parotid

Facial nerve passes In the Substance of parotid but does not supply it.

43. a) Tectorial membrane

Ref: Essentials of Human Anatomy, Head and Neck, Vol.2, A.K. Datta, 3rd edition, 2003, page 353-355

Cochlear Duct (Scala Media)

- Boundaries: Bounded by the following structures.
  - Medially by vestibular or Reissner's membrane.
  - Laterally by stria vascularis.
  - Below by trhe tympanic lip of the osseous spiral lamina in the medial part and basilar membrane in the lateral part.
- Basilar membrane is subdivided into a:
  - Lateral part (zona pectinata)
  - Medial part (zona arcuata) upon which rests the organ of Corti
- Projecting free edge of osseous spiral lamina has 2 lips:
  - Tympanic lip which gives attachment to basilar membrane.
  - Vestibular lip which gives attachment to tectorial membrane (Note: vestibular membrane attached to somewhat away from the lip of vestibular lip
- Tectorial membrane
  - Acellular protein rich fibrillated gelatinous structure.
  - Attached to the vestibular lip of osseous lamina.
  - Covers the stereocilia of the inner and outer hair cells.
- Vestibular or Reissner's membrane- separates the scala media from scala vestibule.
- Basilar membrane- separates the scala media from scala tympani.

44. b

6th Aortic arch Proximal part – Pulmonary artery*

Distal part disappear on the right side but persist on the left side as ductus arteriosus*

45. a, b, d

Features of Horner's syndrome:

a) Ptosis b) Miosis
c) enophthalmos d) Anhydrosis

46. a) Inferior olivary nuclei

Inferior olivary nuclei is the site of cerebellar input.

47. c) At the same levels as cricoid cartilage

Chassaignac's tubercle is a tubercle on the transverse process of C6 vertebra which lie At the same level as cricoid cartilage

48. d) Optic canal

Optic canal is located between Lesser wing and body of sphenoid and not in greater wing of sphenoid

49. b) ~~Subclavian~~

The internal thoracic veins are tributaries of the ~~Subclav~~ian brachiocephalic

50. c) Mucos membrane below vocal fold

Internal laryngeal nerve is a sensory and supplies Mucous membrane above vocal fold

Mucous membrane below vocal fold is supplied by recurrent laryngeal nerve.

51. a, b, c, d

Lesion of the left oculomotor nerve includes all of the following:-

a) Loss of left pupillary constriction when light is shown in the left eye
b) Loss of left pupillary constriction when light is shown in the right eye
c) Pupillary dilation (mydriasis) in the left eye
d) Paralysis of the ciliary muscle in the left eye

52. a, c

a) The opening of the auditory tube is located in the lateral wall of the nasopharynx - True
b) The soft palate is at the level of separation of the laryngopharynx and the oropharynx - false
c) The pharynx is continuous with the esophagus at the level of the sixth cervical vertebra - true
d) The afferent limb of the gag reflex is cranial nerve X; the efferent limb is cranial nerve IX – False – Afferent – IX and efferent – X

53. c) Cricoarytenoid

Sixth pharyngeal arch gives rise to All intrinsic muscles of larynx except cricothyroid

54. c) Processes cochleariformis

Anatomical landmark which is closely associated with geniculate ganglion is Processes cochleariformis

55. d) Glossopharyngeal

Ant 2/3 Genereal- Lingual , Taste - Chorda tympani
Past 1/3 – Glossopharyngeal
Posterior most/ root of tongue – internal laryngeal

56. a) Lateral to the external carotid

Initially Internal carotid artery at the bifurcation from the common carotid is Lateral to the external carotid. It is known as Internal carotid artery because it supplies within the cranial cavity

57. a) Angular vein to ophthalmic vein to cavernous sinus

Most direct route of spread of this infection to cavernous sinus is Angular vein to ophthalmic vein to cavernous sinus

58. b) Inferior anastomotic vein

Inferior anastomotic vein – Vein of labbe
Superior anastomotic vein – Vein of trolard

59. d) Vertebral artery

Vertebral artery passes through Foramen transversarium of C6 to C1.

60. b) Jugulo digastric node

Lymph from the tonsils drain into the Jugulo digastric node

61. e) Trochlear

The cranial nerve with the longest intracranial course Trochlear.

62. a) Superior ganglion

The largest ganglion in the neck is Superior ganglion which is formed by fusion of upper four cervical ganglia

63. c) External laryngeal nerve

All muscles of Larynx are supplied by Recurrent laryngeal nerve except Cricothyroid which is supplied by External laryngeal nerve

64. d) Sigmoid sinus and straight sinus

The cavernous sinus communicates directly with Superior & Inferior petrosal sinus, Pterygoid venous plexus, Basilar venous plexus and Veins in orbit but Not with Sigmoid sinus and straight sinus

65. a) Superior semicircular canal

Arcuate eminence of the petrous temporal bone is caused by Superior semicircular canal

66. a) Oculomotor nerve

Oculomotor nerve &Trochlear nerve lie between superior cerebellar artery and posterior cerebral artery

67. c) Internal jugular

All veins of thyroid drain into Internal jugular except Inferior thyroid vein which drains into Brachiocephalic vein.

68. a, b, d

The actions of superior rectus muscle is Abduction, Intorsion and Depression.

69. c) Passes through foramen ovale

- Bronch of Trigeminal
- Related to OTIC ganglion

70. b) Intorsion

The actions of superior rectus muscle is Adduction, Intorsion and Elevation.

71. d) Apex of orbit between optic nerve and lateral rectus

Cilliry ganglion is located in the Apex of orbit between optic nerve and lateral rectus

72. b, d

Lower part of medulla, Vertebral artery and spinal branch of accessory nerve pass through the foramen magnum

73. a) Vidian nerve

Vidian nerve lies in the floor of sphenoidal air sinus

74. a) Levator veli palatine

Sinus of Morgagni: [The interval between base of skull and superior constrictor muscle].

Structures passing through sinus of Morgagni:

- Auditory tube.
- Levator veli palatine.
- Ascending palatine artery.
- Palatine branch of ascending pharyngeal artery.

75. a) Stylo pharyngeus

The only pharyngeal muscle innervated by the glosspharyngeal nerve is Stylo pharyngeus, rest all are supplied by Vago Accessory complex.

76. b) Diencephalon

The retina and optic nerve is an out growth of the Diencephalon

77. c, d

Protrusion of the mandible is done by Medial pterygoid & Lateral pterygoid

Retraction of the protruded mandible is done by Temporalis and deep fibres of Masseter.

If we have to choose one Temporalis is better

78. a) Hyrtl's fissure or tympanomeningeal fissure:

- Hyrtl's fissure is a transient anatomic landmark in the developing fetal petrous temporal bone and is usually closed by the normal progression of ossification in the 24th week of gestation.
- It occasionally persists into extrauterine life and cause recurrent meningitis and spontaneous CSF ottorhoea.

79. d) Zygomatic nerve

Zygomatic nerve passes through infra orbital fissure

Superior ophthalmic vein and Trochlear nerve pass through infra orbital fissure

Ophthalmic artery passes through optic canal

80. b) Facial

Artery palpable at the anterior border of masseter is Facial

81. b) 2 nd arch

Branchial fistulas occur when the second pharyngeal arch fails to grow caudally

over the third and fourth arches, leaving remnants of the second, third and fourth clefts in contact with the surface by a narrow canal.

82. b, c

- Stenson's duct opens into the vestibule of the mouth opposite the crown of upper second molar Tooth.
- External Carotid artery, retromandibular vein & Facial Nerve(NOT Facial Artery) Traverse through the gland

83. a) Dilator pupillae

Parasympathetic division innervates Dilator pupillae and ciliaris.

Sympathetic division innervates sphincter pupillae.

84. a) Lateral pterygoid muscle contracts

a) Lateral pterygoid muscle contracts – True
b) Movement in vertical axis – False
c) Articular disc moves backwards – False
d) Head of the mandible moves forwards – False

85. b) Chorda tympani

Taste sensation from the anterior 2/3 of tongue is carried by Chorda tympani

General sensation from the anterior 2/3 of tongue is carried by Lingual.

86. c) Ophthalmic N.

The tip of the nose is supplied by ext. nasal nerve branch of Ophthalmic N.

87. a) Aortic arch& B. Right subclavian artery

left side – Arch of Aorta
Right side – Right subclavian artery

88. c) Glossorpharyngeal nerve

Taste & General sensation to the posterior one-third of the tongue is mediated by the Glossorpharyngeal nerve

89. d) Post.auricular N

Post.auricular N is not a content of tympanic cavity/ middle ear.

90. a) Soft palate

Cough Receptors are not seen in Soft palate

91. c, d & e

Waldeyer's internal ring component(s) include Tubal tonsils, Palatine tonsils, Adenoids and Lingual tonsil.

92. c) Trochlear

The Thinnest cranial nerve is Trochlear nerve.

93. a) Sclera

The nerve fibers forming the optic nerve exit the eye posteriorly through a hole in the sclera that is occupied by a mesh-like structure called the lamina cribrosa

94. BCDE

Epiglottis

Develops from the 4th pharyngeal arch

The epiglottis is a cartilaginous flap that covers the laryngeal inlet upon swallowing, composed of elastic cartilage

The epiglottis has a lingual and laryngeal surface, the former is consistent with the oropharynx posteriorly, and is covered in non-keratinized stratified squamous epithelium

The laryngeal surface consists of respiratory epithelium, which consists of pseudostratified ciliated epithelium with goblet cells (which secrete mucus), and is therefore consistent with the rest of the laryngeal epithelium. This surface forms the anterior wall of the laryngeal vestibule. There is a pre-epiglottic space between the lingual surface of epiglottis and thyrohyoid membrane, this space contains the adipose tissue.

The epiglottis is one of the three large unpaired laryngeal cartilages, the other two being the book shaped thyroid and the signet ring shaped cricoid cartilages

The epiglottis gains its blood supply from the superior laryngeal artery, which is a branch of the superior thyroid artery (a branch of the external carotid artery).

Lymphatic drainage of the epiglottis occurs along the superior laryngeal artery that drains to the deep cervical lymph nodes. Venous drainage is from the superior and inferior laryngeal veins that follow the same course as

the arteries, and drain into the internal jugular vein and the left brachiocephalic vein respectively.

The recurrent laryngeal nerves enter the larynx by passing in the groove between the trachea and esophagus. The nerves innervate the muscles of the larynx (aside from the cricothyroid). The sensory supply of the epiglottis comes from the internal laryngeal branch of superior laryngeal nerve (branch of vagus nerve).

95. c) Vertebral artery

Anterior & posterior Spinal artery are branches of Vertebral artery

96. b) Straight Sinus

The vein of galen is formed by fusion of two internal cerebral veins and it drains into Straight Sinus.

97. b. Optic nerve

b. Optic nerve does not pass through superior orbital fissure but passes through optic canal.

98. c. Levator palperae superioris

Levator palperae superioris is supplied by Oculomotor nerve.

99. b. Submental lymph node

Tip of tongue drains into Submental lymph node

100. B, C & E

External Carotid artery, retromandibular vein & Facial Nerve(NOT Facial Artery) Traverse through the gland

101. d) All of the above

102. c) Mandibular

Mandibular isn't in lateral wall of cavernous sinus.

Following structures are in lateral wall of cavernous sinus -

a) Oculomotor
b) Trochlear
c) Maxillary
d) Ophthalmic

NOTE: According to Gray's 41st edition Maxillary nerve is also not considered in lateral wall of cavernous sinus.

103. a. Optic nerve

Optic nerve is not related to cavenous sinus.

Following structures are related to cavenous sinus except –

a) 3rd nerve
b) 4th nerve
c) 6th nerve
d) V_I nerve
e) V_{II} nerve

104. b) Buccinator

Mandibular branch of Trigeminal pierces Buccinator but does not supply

105. c) Auricular branch of Vagus nerve

Alderman's nerve is Auricular branch of vagus nerve also known as Arnold's nerve.

106. d) Soft palate

Cranial accessory nerve (Vago accessory comples)supplies Soft palate.

Spinal accessory nerve supplies a) Sternomastoid b) Trapezius

The splenius capitis muscle is innervated by the posterior ramus of spinal nerves C3 and C4.

107. a. Deviation of tongue to right

Action of Genioglossus is to protrude the tongue. If right muscle is not active then only left sided muscle will act and protrude the tongue to right side.

108. A,B,C & E

Nucleus is located in caudal mesencephalon along ventral wall of cerebral aqueduct

109. c) Lateral pterygoid

Lateral pterygoid is the only muscle of mastication which acts as Depressor of Mandible.

110. b. Sympathetic + greater superficial petrosal nerve

Nerve of pterygoid canal (aka vidian's nerve)is Sympathetic around internal carotid artery known as Deep petrosal nerve + greater superficial petrosal nerve

111. A, B

It is formed by:

1. Pharyngeal branch of the vagus nerve carrying fibres from cranial part of the accessory nerve.

2. Pharyngeal branch of the glosso-pharyngeal nerve.
3. Pharyngeal branch from superior cervical sympathetic ganglion.

112. a, b, c, d & e

Afferent of Corneal reflex is branch of Ophthalmic nerve (V_i)
closure of jaw, mastication & nerve supply of temporalis and masseter muscle is by Mandibular nerve (V_{iii})
Sensory loss of face by all three branches of Trigeminal

113. a) Otic ganglion

The secretomotor fibre to the parotid gland passes through Otic ganglion.

114. b) Genioglossus

Safety muscle of the tongue is Genioglossus
Safety muscle of the larynx is Posterior cricoarytenoid.

115. c) Superior sagittal sinus

Superior cerebral veins drain into Superior sagittal sinus

116. d) Parotid gland

Facial N. supply all except Parotid gland. It passes through and through the gland but doesnot supply.

117. a) Platysma

Platysma is Subcutaneous muscle extending from the clavicle to the mandible supplied by cervical branch of Facial nerve.

118. d) Hypoglossal

All Muscles of tongue are supplied by Hypoglossal except Palatoglossus which is supplied by Vago Accessory complex.

119. c) Tensor veli palate

Cranial part of Accessory nerve supplies all palatal muscles except Tensor veli palate which is supplied by Mandibular nerve.

120. b) Downward, laterally, backwards

Nasolacrimal duct is directed Downward, laterally, backwards

121. a, e

Middle cerebellar peduncle & Motor nucleus of CN V are only seen in pons but not seen in medulla.

122. CD

Parotid gland
Largest salivary gland
Purely serous gland
The facial nerve forms the parotid plexus within the gland and separates the glandular tissue partially into superficial and deep layers ("lobes").
Duct opens opposite upper 2nd molar
Lymph nodes are embedded in the gland
Benign as well as malignant tumours may arise

123. a, c & d

Thyroid is enclosed between Pretracheal layer of deep cervical fascia
Superior parathyroid glands is located above wrt the recurrent laryngeal nerve

124. a) Greater auricular nerve

Skin over the angle of mandible and parotid area is supplied by Greater auricular nerve

125. c) Spinal dorsal root ganglion

Psuedounipolar neurons are seen in Spinal dorsal root ganglion

126. a) Trochlear

Trochlear nerve decussate within the brain and is only cranial nerve which exits from dorsal aspect of brain.

127. c) Facial nerve

Auricular branch of Vagus supplies part of pinna and is carried by Facial nerve

128. b) Four

Trigeminal nerve has Four nuclei in CNS. Three sensory & one motor.

129. A,B E

Anterior Ciliary arises from Muscular Branches

130. c) Lacrimal gland is supplied by Spenopalatine ganglion

Greater petrosal nerve carries preganglionic parasympathetic to Spenopalatine ganglion and post ganglionic parasympathetic are carried by zygomatic nerve and finally by lacrimal nerve to lacrimal gland.

131. a) Alar ligament

Alar ligament is Not present in temporomandibular joint

132. b) Cribriform plate of ethmoid

The roof of the olfactory region is formed by Cribriform plate of ethmoid

133. a) Genioglossus

Ipsilateral deviation of tongue is due to paralysis of Genioglossus

134. a) Abducent nerve

Dorello's canal transmits Abducent nerve in tip of temporal bone to en route to cavernous sinus

135. d) Greater superficial petrosal N

First branch of focial nerve is Greater superficial petrosal N

136. d) Maxillary nerve

Structures passing through Foramen Rotundum is Maxillary nerve

137. d) Mandibular nerve

Structures passing through Foramen ovale is Mandibular nerve, Accessory meningeal A., Lesser petrosal nerve & Emissary vein.

138. d) Glossopharyngeal nerve

Structures passing through jugular Foramen Glossopharyngeal nerve, Vagus & Accessory Nerve

139. A,B,C,E

a) It is separated from the optic chiasma by the sells turcica – True
b) It is situated deep in the sella– True
c) The spenoidal air cells lie inferior to it– True
d) It develops from the base of the 3rd ventricle from the pars anterior – False – from pars posterior
e) It is supplied by a branch of the internal carotid artery– True

140. A, B

a) Vocalis muscle - recurrent laryngeal nerve
b) Posterior cricoarytenoid - recurrent laryngeal nerve
c) Cricothyroid - external laryngeal nerve
d) Stylopharyngeus - Glossopharyngeal
e) Omohyoid – Ansa cervicalis

141. a) Inferior petrosal sinus

Inferior petrosal sinus is draining channels of cavernous sinus
Rest all are tributaries of cavernous sinus

142. a) Superior thyroid artery

Superior thyroid artery is first branch of the external carotid artery

143. a) Foramen spinosum

Foramen spinosum transmits recurrent meningeal nerve of mandibular nerve.

144. a) Lateral ventricle - third ventricle - aqueduct of Sylvius - fourth ventricle

Flow of Cerebrospinal fluid:-Lateral ventricle - third ventricle - aqueduct of Sylvius - fourth ventricle

145. b. Superior petrosal sinus

Superior petrosal sinus is a drainage channel of cavernous sinus

146. b)Mandibular branch of 5th nerve

Tensor tympani is supplied by Mandibular branch of 5th nerve

147. a) Buccinator

Buccinator doesnot belong to muscles of mastication.

148. a) Oculomotor

For light reflex afferent- optic & Efferent- Oculomotor

149. a) Palatoglossus

All muscles of tongue are supplied by XII cranial nerve except Palatoglossus

150. b) Thyrohyoid

Thyrohyoid is not supplied by ansa cervicalisv

General Anatomy and Embryology – Questions

Q1. Cells which surround the oocyte in Graffian follicle are called?

a) Discus Proligerus
b) Cumulus Oophorus
c) Luteal Cells
d) Villus Cells

Q2. Acrosome cap of Sperm is derived from?

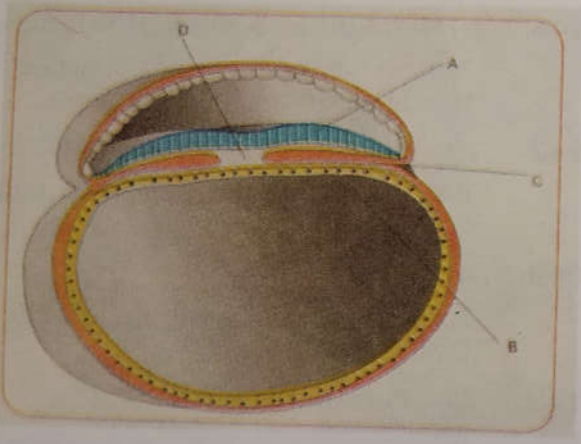
a) Golgi body
b) Mitochondria
c) Nucleus
d) Ribosome

Q3. Capacitation takes place mainly in :-

a) Vagina
b) Cervix
c) Uterus
d) Fallopian tube

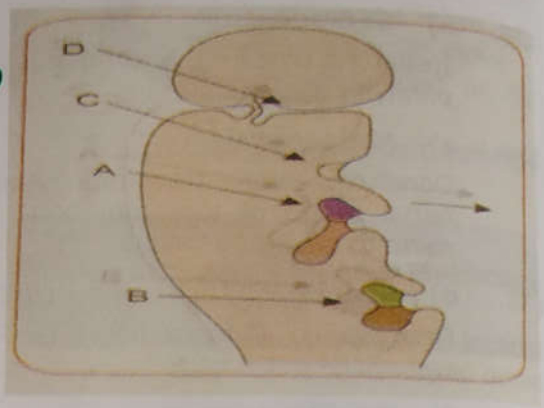
Q4. From which of the following does nucleus pulposus is formed

a. A
b. B
c. C
d. D



Q5. A young patient with absent thymus and presented with hypoparathyroidism and tetany. Which of the following marked area in the picture is defective in this condition?

a. A
b. B
c. C
d. D



Q6. Stratified squamous epithelium is seen at all the following sites except:

a) Skin
b) Vagina
c) Esophagus
d) Gallbladder

Q7. MC type of cartilage covering articular surface :

a) Hyaline
b) Elastic
c) Fibrous
d) All

Q8. Which is the most prominent spinous process ?

a) T1
b) C7
c) T6
d) L5

Q9. Which of the following bones has no medullary cavity -

a) Ulna
b) Clavicle
c) Fibula
d) Humerus

Q10. Coracoid process is a kind of epiphysis -

a) Atavistic
b) Pressure
c) Traction
d) Aberrant

Q11. General visceral fibres do not supply-

a) Smooth muscles
b) Skeletal muscles
c) Cardiac muscles
d) Glands

1. b	2. a	3. d	4. d	5. a	6. d
7. a	8. b	9. b	10. a	11. b	

Q12. Which of the following is a syndesmosis ?

a. Superior tibiofibular joint
b. Inferior tibiofibular joint
c. Superior radioulnar joint
d. Inferior radioulnar joint

Q13. The type of joint present between Epiphysis & Diaphysis is-

a) Fibrous joint b) Synovial joint
c) Synchondrosis d) Syndesmosis

Q14. Serous demilunes is present in?

a) Serous glands b) Mucous glands
c) Mixed glands d) All salivary glands

Q15. Which of the following is example of hyaline cartilage?

a. Epiglottis
b. Epiphyseal plate
c. Apex of Arytenoid cartilage
d. Pinna

Q16. Sphenoid vomer joint is which type of joint ?

a) Schindylesis b) Gomphoses
c) Syndesmoses d) Synchondrosis

Q17. Secondary spermatocyte is ?

a) Haploid (n) and 2N
b) Haploid (2n) and 2N
c) Diploid (2n) and N
d) Diploid (n) and 2N

Q18. Elastic cartilage is found in

a) Tracheal cartilage
b) Auricular cartilage
c) Articular disc
d) Bronchi

Q19. Nutrient artery supplying the bone enters from which end ? (DNB Nov 12 Pattern)

a) Away from the growing end
b) Towards the growing end
c) No fixed entry point
d) Metaphyseal end

Q20. Left common cardinal vein is reduced to ?

a) Great cardiac vein
b) Azygos vein
c) SVC
d) Coronary sinus

Q21. Costochondral joint is example of?

a) Fibrous joint
b) Primary cartilaginous joint
c) Secondary cartilaginous joint
d) Synovial joint

Q22. Lymphatic drainage of Glans penis is by ?

a) Superficial inguinal lymph nodes
b) Deep inguinal lymph nodes
c) Internal iliac lymph nodes
d) Preaortic nodes

Q23. Example of traction epiphysis is ?

a) Trochanters of Femur
b) Os trigonum
c) Condyles of Femur
d) Coracoid process

Q24. Centrum of vertebra is formed from?

a) Pre axial mesoderm
b) Notochord
c) Paraxial mesoderm
d) Somatic mesoderm

Q25. Trachea is lined by? (DNB Nov 13 Pattern)

a) Simple columnar
b) Pseudostratified columnar
c) Simple cuboidal
d) Stratified squamous, non-keratinized

Q26. Middle piece of sperm tail made up of?

a) Golgibody b) Centriole
c) Mitochondria d) Nucleus

Q27. The cell which forms blood-testis barrier is -

a) Spermatogonia
b) Primary spermatocyte
c) Leydig cell
d) Sertoli cell

Q28. There are low many pairs of spinal nerves -

a) 28 b) 30
c) 31 d) 33

12. b	13. c	14. c	15. b	16. a	17. a	18. b	19. a	20. d	21. b	22. b
23. a	24. c	25. b	26. c	27. d	28. c					

Q29. Which of the following has epiphysis at head -

a) Distal phalanx
b) Middle phalanx
c) Thumb metacarpal
d) Third metacarpal

Q30. Pubic symphysis is which type of joint -

a) Synovial
b) Fibrous
c) Cartilaginous
d) None of the above

Q31. In adult spinal cord normally ends at-

a) Lower border of L1
b) Lower border of L3
c) Lower border of SI
d) Lower border of L5

Q32. Transtubercular plane lies at which vertebral level -

a) L_1 b) L_3
c) L_5 d) S_3

Q33. Collagen found in hyaline cartilage is-

a) Type I b) Type II
c) Type IV d) Type v

Q34. Vertebral arteries of both sides unite to form -

a) Medullary Artery
b) Posterior spinal artery
c) Post Inferior Cerebellar artery
d) Basilar artery

Q35. Follicles are present in which part of lymph nodes -

a) Red pulp
b) White pulp
c) Cortex
d) Medulla

Q36. One primary oocyte forms how many ovum/ova -

a) 1 b) 2
c) 3 d) 4

Q37. All of the following muscles have dual nerve supply except -

a) Subscapularis
b) Pectoralis major
c) Pronator teres
d) Flexor digitorum profundus

Q38. Nerve of Latarjet is seen in-

a) Thorax b) Neck
c) Stomach d) Heart

Q39. Preaxial border of limb is-

a) Ulnar border of forearm
b) Fibular border of leg
c) Radial border of forearm
d) None of the above

Q40. Transpyloric plane separates

a) Hypogastrium from lumbar region
b) Hypochondrium from lumbar region
c) Iliac fossa from lumbar region
d) Umbilical region from lumbar region

Q41. Mastoid process is which type of epiphysis –

a) Pressure b) Aberrant
c) Atavistic d) Traction

Q42. Thinnest bone is a part of which bone -

a) Frontal b) Ethmoid
c) Sphenoid d) Temporal

Q43. Which ligament transfers weight from peripheral to axial skeleton?

a) Coracoclavicular ligament
b) Acromio-clavicular ligament
c) Ligament of Bigelow
d) Sterno-clavicular ligament

Q44. Which of the following is aberrant epiphysis -

a) Coracoid process
b) Greater tubercle of humerus
c) Base of 1st metacarpal
d) Base of 2nd metacarpal

Q45. Dense regular collagen is found in all except -

a) Ligament b) Periosteum
c) Aponeurosis d) Tendon

29. d	30. c	31. a	32. c	33. b	34. d	35. c	36. a	37. c	38. c
39. c	40. b	41. d	42. b	43. a	44. d	45. b			

Q46. Which of the following nerves innervate a dermatome that does NOT lie superficial to its myotome ?

a) Musculocutaneous nerve
b) Axillary nerve
c) Radial nerve
d) Ulnar nerve

Q47. The lower two thirds of the following hematoxylin and eosin stained specimen is similar in appearance to which of the following structures :

a) Articular disc
b) Pinna
c) Epiphyseal plate
d) Intervertebral disc

Q48. Not a pneumatic bone :

a) Ethmoid
b) Mandible
c) Frontal
d) Maxilla

Q49. Adrenal medulla is a derivative of :

a) Surface ectoderm
b) Endoderm
c) Neural crest
d) Mesoderm

Q50. Which of the following is a true statement regarding spermatogenesis

a) Takes around 74 days
b) Occurs in spermatic cord
c) Meiosis occurs only after secondary spermatocyte stage
d) Spermatozoa forms spermatids

Q51. Epithelial lining of esophagus is :

a) Cuboidal
b) Columnar
c) Stratified squamous non- keratinized
d) Stratified squamous keratinized

Q52. Gland of brunner's is found in :

a) Jejunum
b) Duodenum
c) Ileum
d) All

Q53. Fabella is -

a. Same as fibula
b. An accessory projection from fibula
c. A sesamoid bone
d. Pneumatic bone

46. a	47. c	48. b	49. c	50. a	51. c	52. b	53. c

General Anatomy and Embryology – Explanations

1. b) Cumulus Oophorus

- Cells which surround the oocyte in Graffian follicle are called cumulus Oophorus
- Disc like site where oocyte is attached is called as Discus Proligerus.

2. a) Golgi body

- Acrosome cap of Sperm is derived from Golgi bodies
- Mitochondria forms middle piece,
- Nucleus forms the head and centrioles form the tail

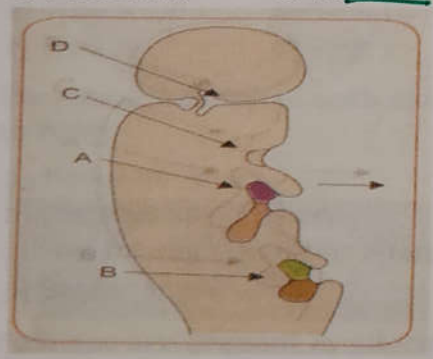
3. d) Fallopian tube

Fallopian tube contributes most among female genital tract Although all parts as given in options are involved in this process

4. d) is site of Notochord,

Nucleus pulposus is remnant of it.

a. Ectoderm b. Endoderm
c. Mesoderm d. Notochord



5. a)

Given condition is Digeorge syndrome. "A" is the marked area for third pharyngeal pouch from where Thymus and Inferior Parathyroid develop.

6. d) Gallbladder

The gall bladder is lined by a simple columnar epithelium.

Skin, Vagina & oesophagus are lined by Stratified squamous epithelium

7. a) Hyaline

Hyaline is MC cartilage covering articular surface it is Fibrocartilage in case of TMJ.

8. b) C7

It is known as Vertebra Prominens

9. b) Clavicle

It is a unique feature of the Clavicle

10. a) Atavistic

It is an example of Atavistic

11. b) Skeletal muscles

General Visceral fibres don't supply Skeletal muscles. They supply Smooth muscles, Cardiac muscle and Glands.

12. b) Inferior tibiofibular joint

a) Superior tibiofibular joint – plane
b) Inferior tibiofibular joint – Syndesmosis
c) Superior radioulnar joint – Pivot
d) Inferior radioulnar joint – Pivot

13. c) Synchondrosis

The type of joint present between Epiphysis & Diaphysis is Synchondrosis

14. c) Mixed glands

It is serous cap(half moon shaped) on mucous acini, so it requires presence of both types of acini. D is incorrect because Parotid is only serous gland where these demilunes are absent

15. b) Epiphyseal plate

a) Epiglottis – Elastic
b) Epiphyseal plate – Hyaline
c) Apex of Arytenoid cartilage – Elastic
d) Pinna – Elastic

16. a) Schindylesis

Sphenoid-vomer joint is Schindylesis

17. a) Haploid (n) and 2N

Secondary spermatocyte is Haploid (n) and 2N. It enters Meiosis II to reduce the amount of DNA

18. b) Auricular cartilage

a) Tracheal cartilage – Hyaline

19.
20.
21.
22.
23.
24.
25.
26.
27.

b) Auricular cartilage – Elastic
c) Articular disc – Fibro
d) Bronchi – Hyaline

19. a) Away from the growing end

- Exp: The nutrient foramen is directed away from the growing end of the bone; their directions are indicated by a jingle, 'To the elbow I go, from the knee I flee'
- The growing ends of bones in upper limb are upper end of humerus and lower ends of radius and ulna. In lower limb, the lower end of femur and upper end of tibia are the growing ends.

20. d) Coronary sinus

Left common cardinal vein is reduced to Coronary sinus

21. b. Primary cartilaginous joint

It is Joint between Bone & Costal Cartilage(Hyaline Cartilage).

22. b. Deep inguinal lymph nodes

Glans penis/ Clittoris drain to Deep inguinal lymph nodes

23. a) Trochanters of Femur

a) Trochanters of Femur – Traction
b) Os trigonum – Atavistic
c) Condyles of Femur – Pressure
d) Coracoid process – Atavistic

24. c) Paraxial mesoderm

Paraxial mesoderm forms somites which forms Dermatome, Sclerotome & Myotome. Sclerotome forms Axial skeleton including Ribs & Vertebrae

25. b. Pseudostratified columnar

Trachea is lined by Pseudostratified ciliated columnar epithelium.

26. c) Mitochondria

a) Golgi body :- Acrosome
b) Centriole :- Tail
c) Mitochondria:- Middle piece
d) Nucleus:- Head

27. d) Sertoli cell

Transverse Processes of Sertoli cells make BTB

28. c) 31

Total no. of spinal nerves – 31
Total no. of Vertebrae – 33

29. d) Third metacarpal

All Phalanx and First Metacarpal have Epiphysis at Base
2nd to 5th Metacarpal have Epiphysis at Head

30. c) Cartilaginous

Pubic symphysis is Secondary Cartilaginous joint

31. a) Lower border of L1

New Born – Lower border of L3
Adult – Lower border of L1

32. c) L_5

Transpyloric Plane – L1
Transtubercular plane – L5

33. b) Type II

Type I – Fibrocartilage and Bone
Type II – Hyaline & Elastic Cartilage
Type IV – Basement Membrane
Fibrocartilage contains both Type I & Type II but Type I is predominant.

34. d) Basilar artery

Vertebral arteries of both sides unite to form Basilar artery

Medullary artery, Posterior spinal artery and Post Inferior Cerebellar artery are branches of Vertebral .

35. c) Cortex

Follicles are present in Cortex
Sinuses are present in medulla
Red pulp & White pulp are found in Spleen.

36. a) 1

One primary Spermatocyte forms 4 Spermatozoa whereas One primary oocyte forms only 1 ovum and 3 polar bodies.

37. c) Pronator teres

a) Subscapularis - Upper & Lower Subscapular
b) Pectoralis major - Medial & Lateral Pectoral nerves

c) Pronator teres – Median
d) Flexor digitorum profundus – Median & Ulnar

38. c) Stomach

It is branch from both Ant and Post. Vagal trunk

39. c) Radial border of forearm

In upper Limb, Thumb & Radius lie in Preaxial border & Little finger & Ulna in Post Axial border.

In Lower Limb, Great Toe & Tibia lie in Preaxial border & Little Toe & Fibula in Post Axial border.

40. b. Hypochondrium from lumbar region

41. d) Traction

Mastoid process is Traction epiphysis

42. b) Ethmoid

Lamina Paprycea is a part of ethmoid

43. a. Coracoclavicular ligament

Coracoclavicular ligament transfers weight from peripheral to axial skeleton

44. d. Base of 2nd metacarpal

All Phalanx and First Metacarpal have Epiphysis at Base. 2nd to 5th Metacarpal have Epiphysis at Head i.e. Head of 1st metacarpal &Base of 2nd metacarpal is aberrant epiphysis.

45. b) Periosteum

Loose (areolar) connective tissue – submucosa in the digestive tract and other viscera lined by mucosae, and the subcutaneous tissue in regions where this is devoid of fat (e.g. eyelids, penis, scrotum and labia), (lamina propria) of mucosal epithelia and vascular endothelia, A variant of loose connective tissue occurs in the choroid and the sclera of the eye.

Dense irregular connective tissue – reticular layer of the dermis; the superficial connective tissue sheaths of muscle and nerves, and the adventitia of large blood vessels; and the capsules of various glands and organs (e.g. testis, sclera of the eye, periostea and perichondria).

Regular connective tissues ligaments, tendons or Aponeurosis

46. a) Musculocutaneous nerve

Musculocutaneous nerve innervate skin of Forearm whereas it supplies muscles of arm.

Other options innervate a dermatome that lie superficial to its myotome

47. c) Epiphyseal plate

Read the text below

Hyaline cartilage seen at Epiphyseal plate

a) Articular disc – Fibro cartilage
b) Pinna - Elastic
c) Epiphyseal plate – Hyaline
d) Intervertebral disc – Fibro cartilage

48. b) Mandible

Read the text below

It does not have air cell/ cavity

49. c) Neural crest

Adrenal medulla is a derivative of Neural crest cell

50. a) Takes around 74 days

Spermatogenesis takes around 74 days

Capacitation takes around 7 hours

51. c) Stratified squamous non-keratinized

Esophagus is lined by Stratified squamous non- keratinized

52. b) Duodenum

Gland of brunner's are found in Duodenum

53. c) sesamoid bone

Read the text below

Fabella is sesamoid bone

Other Seasamoid bones are Patella, Pisiform etc.